

**LOAN GUARANTEES AND  
RURAL TELEVISION SERVICE**

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**HEARINGS**  
BEFORE THE  
**COMMITTEE ON**  
**BANKING, HOUSING, AND URBAN AFFAIRS**  
**UNITED STATES SENATE**  
**ONE HUNDRED SIXTH CONGRESS**

SECOND SESSION

ON

LOAN GUARANTEES FOR PROJECTS TO SUPPLY TELEVISION SERVICE  
TO RURAL AREAS

—————  
FEBRUARY 1 AND 9, 2000  
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## **LOAN GUARANTEES AND RURAL TELEVISION SERVICE**

**TUESDAY, FEBRUARY 1, 2000**

U.S. SENATE,  
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,  
*Washington, DC.*

The Committee met at 10 a.m., in room SD-628 of the Dirksen Senate Office Building, Senator Phil Gramm (Chairman of the Committee) presiding.

### **OPENING STATEMENT OF CHAIRMAN PHIL GRAMM**

Chairman GRAMM. Let me call the Committee to order.

I will ask the witnesses to take their seats. I want to thank everyone for coming this morning. I am a little discouraged that we missed all of our hearings last week, and I'm determined in the next couple of weeks to make up those hearings.

I would like to follow the following procedure today. When we get a quorum, wherever we are in the proceedings, I'm going to stop the hearing and bring up the nomination of Alan Greenspan to be reconfirmed as Chairman of the Board of Governors of the Federal Reserve System.

I will give Members until noon to be recorded on that topic. I would have extended it to 5 p.m., but I am still hoping that we might push our leadership to bring the nomination up earlier. Members will have until noon to vote on that topic.

We are here today to talk about the loan guarantees on the satellite bill. I think every Member of Congress is familiar with the issue. It dominated the Congress in the last couple of weeks of the 1999 session.

We are committed in this Committee to produce a loan guarantee that will have the following objectives: It will be a rational approach to the problem of trying to provide an incentive for the private sector or some nonprofit entity, or some combination thereof, to provide access to local television signals in the more remote rural areas of America. We will try to write a loan guarantee program that maximizes the probability that the loans will be paid back and that the taxpayer will not be left holding the bag. I think we can achieve both objectives.

I have tried during the recess to look back at loan guarantees for the last 75 years. I have read the bill that was adopted by the satellite Conference Committee in detail, and let me say that, given the amount of time they had to work on it, I think it was a good effort. I do believe that, building on what they did, we can greatly improve that bill.

I would like to say that we will produce a bill within the deadline that we set for ourselves in the agreement. I believe that probably no other Member has done more to make all this possible than Senator Conrad Burns. He will be testifying before the Committee on February 9.

We have a lot of work to do. We will be holding an additional hearing. I believe we have started this process with an open mind, not an empty mind, but an open mind. If anyone has any concerns, ideas, or suggestions for how we can improve the loan guarantee program—how we can make it work, make it safer and sounder—we would very much like to hear from them.

Let me see if any of my colleagues would like to make an opening statement.

Senator Bayh.

**OPENING COMMENTS OF SENATOR EVAN BAYH**

Senator BAYH. Thank you, Mr. Chairman. I have no opening statement. I would just like to welcome our witnesses and thank them for coming today. I look forward to hearing their statements.

Chairman GRAMM. Senator Bennett.

**OPENING COMMENTS OF SENATOR ROBERT F. BENNETT**

Senator BENNETT. Thank you, Mr. Chairman, for holding this hearing today. I, like Senator Bayh, have no opening statement. I welcome the witnesses and look forward to hearing their testimony.

Chairman GRAMM. Senator Enzi.

**OPENING COMMENTS OF SENATOR MICHAEL B. ENZI**

Senator ENZI. Thank you, Mr. Chairman. I appreciate you holding these hearings. I would ask that my full statement be made a part of the record. I would just mention that if you could see the volume of mail my office has received directed at satellites, you would know how important this issue is for my constituents. It is not only the major issue, it is also the majority of my mail.

Wyoming is a State that has a lot of open space, a lot of distance. We have only 480,000 people spread over borders that are 400 miles on a side. It is a long way between people. Sometimes satellite TV is the only way they have of not only getting to watch their favorite sports teams and television shows, but, more importantly, it's the way they get their local weather warnings that can potentially affect their livelihood, and in many cases, even their lives. It's not just an entertainment thing for them. It's a life and death matter.

I want to take this opportunity to welcome David Moskowitz, Senior Vice President of EchoStar Communications, who employs several hundred Wyoming residents in his operation in Cheyenne, with headquarters in Littleton, Colorado. We are very proud and pleased to have that important facility in Wyoming.

Wyoming only has television stations in three cities—Casper, Cheyenne, and Jackson. The rest of the State is served by stations out-of-State or by relay transmitters that bring stations to the outlying towns. We have long distances and tall mountains that make even the best efforts of over-the-air broadcasters and cable companies even more difficult.

For the people that are located in the remote areas of the State, we need a solution. We are looking to you for the solution. I thank the Chairman for holding these hearings to try to arrive at a solution in a timely manner so that these people will not be left out of television.

Thank you.

Chairman GRAMM. Senator Enzi, let me thank you. I understand today's your birthday. I'm not going to recount the relatively high number that we're celebrating.

[Laughter.]

In any case, it is higher than it was last year.

[Laughter.]

I want to say, on behalf of the Committee, "Happy Birthday." I want to thank you for all you have done on this Committee. I don't remember a new Member of the Committee contributing more than you have for a very long time. I want you to know that we appreciate it.

Senator ENZI. Thank you very much.

Chairman GRAMM. Do any of you have an opening statement?

Senator Johnson.

#### **OPENING COMMENTS OF SENATOR TIM JOHNSON**

Senator JOHNSON. I will submit a statement for the record. This is a timely hearing. The issue is both critically important and very urgent to my home State of South Dakota, and I appreciate your holding this hearing at this time.

Chairman GRAMM. Thank you, Senator Johnson.

Senator Bryan.

#### **OPENING COMMENTS OF SENATOR RICHARD H. BRYAN**

Senator BRYAN. Mr. Chairman, I would include a statement for the record as well. I would just say, parenthetically, no issue that we have dealt with in the last Congress generated more mail, more phone calls, more e-mail contact than this satellite issue.

This issue is one of profound importance to my own State, where, notwithstanding the fact that 85 percent of the people in Nevada live in metropolitan areas, for those who live outside of the metropolitan Las Vegas and Reno market, there is a vast expanse. We hear from those people that are very much interested in this issue.

I thank you, Mr. Chairman, for convening this timely hearing and ask that my full statement be made a part of the record.

Chairman GRAMM. Your statement will be made a part of the record as if read in its entirety.

Senator Bunning.

#### **OPENING COMMENTS OF SENATOR JIM BUNNING**

Senator BUNNING. Thank you, Mr. Chairman. I want to thank all of the panelists for appearing today. I have a statement which I would like to include for the record.

In the State of Kentucky, we need a lot of assistance in servicing all of the people who rely on dishes, particularly in eastern and rural Kentucky. I am looking forward to hearing the testimony of our witnesses and to trying to solve this problem.

Thank you.

Chairman GRAMM. Thank you, Senator Bunning.  
 Senator Allard, do you have an opening statement?

**OPENING COMMENTS OF SENATOR WAYNE ALLARD**

Senator ALLARD. Mr. Chairman, I would like to place my statement in the record so we can hear from the witnesses.

Thank you.

Chairman GRAMM. Your statement will be placed in the record as if read in its entirety.

Let me now introduce the members of our first panel. I would like to ask each member of the panel to try to present their testimony in 5 minutes or less. If you run over a minute or two and you feel that you absolutely need the time, I am not going to slam down the gavel and stop you. If you go beyond the allotted time by more than a minute or two, then I may start staring at you and throwing ice or something. But try to focus your testimony to the degree you can in 5 minutes.

Our first witness is James Yager, President and Chief Operating Officer of Benedek Broadcasting, which is a rural broadcaster. He is also Joint Board Chairman of the National Association of Broadcasters and will be testifying on their behalf. Our second witness will be Richard Sjoberg, who is President and Chief Executive Officer of Sjoberg's Incorporated, a small rural cable company located in northwestern Minnesota. Next, we will hear from Bob Phillips, President and Chief Executive Officer of the National Rural Telecommunications Cooperative. Following Mr. Phillips, we will hear from David Moskowitz, Senior Vice President of Legal and General Counsel, Secretary, and Director of EchoStar Communications Corporation. Last, but not least, will be Steven Cox, Senior Vice President of DIRECTV, Incorporated.

Mr. Yager, we are ready to hear your testimony.

**OPENING STATEMENT OF K. JAMES YAGER  
 PRESIDENT AND CHIEF OPERATING OFFICER  
 BENEDEK BROADCASTING, ROCKFORD, ILLINOIS  
 AND JOINT BOARD CHAIRMAN  
 NATIONAL ASSOCIATION OF BROADCASTERS  
 ON BEHALF OF THE  
 NATIONAL ASSOCIATION OF BROADCASTERS**

Mr. YAGER. Thank you, Mr. Chairman. Broadcasters very much appreciate your holding this hearing on a subject that is vital to the public's access to local television. This is also an important issue to me personally. My company, Benedek Broadcasting, currently operates 26 television stations in small markets located in 16 States across the country, including seven of the States represented by Senators on this panel.

As the Chief Operating Officer of Benedek, I am very concerned that consumers living in the Benedek markets will never have the chance to see our network-affiliated stations on their satellite dish without a loan guarantee program similar to the one proposed by the House and Senate conferees last year. Given how important local stations are in providing news, weather, emergency, and other information to local viewers, all of this should make resolving this issue a high priority.

Currently, there are 211 television markets nationwide. Both DIRECTV and EchoStar, the two largest satellite providers, are focused on providing local signals only in the top 35 or 40 markets around the country. Another operator, Local TV on Satellite, says it may go to the top 68 markets or so. But even with that coverage, 25 percent of the audience nationwide would have no chance of seeing local stations on satellite.

Let me point out that 17 States have no television market in the top 50 television markets in the country. As a result, both we and you have been looking at ways to resolve this issue in a consumer-friendly, yet cost-effective, manner.

There are any number of economic and technical hurdles facing someone trying to create a viable business plan to provide local signals to medium- and small-sized markets. The first is clearly the limited number of people who live in the smallest 150 markets or so, making it tough for anyone to break even in the short-term in this business. Moreover, in order to make the service consumer-friendly and to hold down costs, the rural plan needs to focus on wholesaling local signals, rather than bearing the burden of retailing them directly to consumers.

The likely partners for such a relationship are sitting next to me at this table—EchoStar and DIRECTV. But they each have different systems for delivering their signals, so many technical issues will have to be resolved to make any rural service compatible and workable. The large number of stations located in rural America also requires a special satellite using spot-beam technology, an additional orbital slot, and numerous uplink facilities. At the end of the day, we anticipate that implementing any local service will cost anywhere between \$600 million and \$1 billion in the small- to mid-sized markets.

As we look at this challenge, the National Association of Broadcasters (NAB) supports the concept of having the Government provide an economic incentive to allow local-into-local service to spread beyond the major markets. However, any such incentives should be consistent with other loan guarantee programs already in use by the Government. In addition, Mr. Chairman, please do not create another bureaucracy or allow the Government to mandate the specifics of a business plan.

Let me add that some here today may suggest the elimination of the time- and court-tested principle of must-carry, which has been consistently endorsed by Congress. That approach would be exclusive, not inclusive, and defies the very tone of this hearing today, which has focused on providing more local TV service to consumers, not less. Any call to drop must-carry should be rejected.

Last year, the conferees developed a loan guarantee proposal that ultimately was taken out of the satellite bill that passed. In looking at that proposal, we see a number of areas that need further refinement. For example, that proposal placed limits on the size of the loans allowed. We believe that issue would best be left open-ended in order to accommodate the various means of accomplishing the local-into-local service.

We feel the proposal involved too many Government agencies. Congress, the U.S. Department of Agriculture, the OMB, and the

NTIA would all have a cut at the apple, with a cumbersome approval process that we think is unnecessary.

We question the proposal's handling of subordination. Putting the first lien in the hand of the Government will likely be a disincentive for lenders to risk their funds on creating local-into-local service. If additional financing is needed, it may be unavailable if the Government does not subordinate some or all of its interests.

Finally, we do not agree that DIRECTV and EchoStar should be excluded from any loan guarantee program. Allowing a consortium that includes either or both of these established satellite vendors may be the quickest way to solve a host of problems related to rolling out local-into-local service in rural areas.

As I close, let me commend the announcement of a public inquiry by the NTIA on this issue. We look forward to adding our comments to Assistant Secretary Rohde's worthy undertaking.

Let me also praise your efforts, Mr. Chairman, and those of your colleagues, as you begin to look critically at local-into-local service for small markets.

Please accept my assurance that the National Association of Broadcasters and Benedek Broadcasting look forward to working with you and the Committee to come up with an appropriate resolution that provides proper incentive for local-into-local service and ensures access to local television for all Americans who use satellite dishes for their television reception.

Thank you.

Chairman GRAMM. Thank you.

Mr. Sjoberg.

**OPENING STATEMENT OF RICHARD SJOBERG  
PRESIDENT AND CHIEF EXECUTIVE OFFICER  
SJOBERG'S INCORPORATED, THIEF RIVER FALLS, MINNESOTA**

Mr. SJOBERG. Mr. Chairman and Members of the Committee, my name is Dick Sjoberg. I'm President and CEO of Sjoberg's Incorporated, a privately held cable company in northwestern Minnesota.

My family entered the cable television business in 1962. At that time, our main goal was to bring broadcast signals to communities that could not receive them.

Today, our company brings 148 channels to approximately 7,400 customers in 33 small rural towns and townships, all of them connected by fiberoptic cable. Despite low population densities of 12 to 22 homes per mile of cable plant, we currently offer half of our customers high-speed Internet access. The other half will have cable modem service by the end of the year. Some communities we serve are as far as 200 miles away from the broadcast stations that we carry on our cable systems.

My company is committed to delivering new broadband services to all of our customers, including our schools, and to ensuring that these services are as good as those offered in urban areas. To date, my company is the only video service provider to make any major investments in these rural northwestern Minnesota communities, where I am a resident, participate in community events, and pay approximately \$30,000 a year in local franchise fees. Moreover, I'm not alone. As the FCC's report, *Broadband Today*, indicates, small cable systems across the country are deploying broadband.

The NCTA supported the Satellite Home Viewer Improvement Act of 1999, procompetitive legislation that changed the law to permit satellite companies to retransmit local broadcast signals into local markets. We are concerned, however, about proposals that might provide Government subsidies to some industries—but not other industries—in an otherwise competitive video marketplace.

Small cable operators like myself compete against DBS in every market we serve. Our satellite competitors already have certain advantages, like greater channel capacity and lower marginal costs, in sparsely populated areas. Yet, some of the proposals for expanding local-into-local service compound DBS's advantages by having the Federal Government subsidize our competitors' capacity to provide local broadcast signals, even though they have market capitalizations of \$21 billion and \$16 billion and annual revenues ranging from \$1 to \$6 billion.

As a small cable operator, I already carry all local broadcast signals on my systems. I raised the money to carry these signals in the private capital markets. The fear of many small cable operators is that any rural loan guarantee program will be interpreted as a congressional mandate to build another satellite—at discounted, federally insured rates—to carry local broadcast signals into those markets which local businesses like myself can serve more cost-effectively using technologies like translators, repeaters, relay stations, microwave, fiberoptic cable, and wireless systems.

For example, my company has cost-sharing arrangements with Roseau County and Lake of the Woods County to transport over-the-air broadcast signals into areas where they would not normally reach. We do it using a combination of fiberoptic cable, microwave signals, and translators. In these areas, the local rural cooperative, which is a selling agent for DIRECTV, provides its customers with dual antennas to receive both the satellite signals and the local broadcast signals in direct competition with my cable service.

If the Congress moves forward with a Federal loan guarantee program, I would very much like to see it be technology neutral, giving “Main Street” businesses the opportunity to extend more cost effectively the reach of the local broadcast signal. The need for such technology neutrality is especially important since cable companies like mine are providing rural customers with broadband services and high-speed access to the Internet, helping to bridge the digital divide.

Any Government funding or loan guarantee program should be focused on areas with the least local broadcast signal coverage and should not be used to subsidize DBS service in urban or suburban markets.

The program should be structured in a manner that creates the smallest paperwork burden possible, thus encouraging the smaller businesses to apply and provide cost-effective, local solutions.

Thank you for your attention. I stand ready to work with this Committee as it moves forward on legislation to provide better television service in rural and underserved markets.

Thank you.

Chairman GRAMM. Thank you, Mr. Sjoberg.  
Mr. Phillips.

**OPENING STATEMENT OF B.R. PHILLIPS III  
PRESIDENT AND CHIEF EXECUTIVE OFFICER  
NATIONAL RURAL TELECOMMUNICATIONS COOPERATIVE  
THE PLAINS, VIRGINIA**

Mr. PHILLIPS. Thank you, Chairman Gramm. I am Bob Phillips, President and CEO of the National Rural Telecommunications Cooperative. The NRTC is a cooperative of nearly 1,000 rural electric and telephone systems that provide services in 48 States. We serve the underserved and the unserved markets with electric and telephone service.

The NRTC's mission has been to help those members bring the benefits of advanced telecommunications services to these unserved markets. We believe so much in this mission that back in 1992, we raised and invested \$100 million with DIRECTV to launch the Nation's first direct broadcast satellite (DBS) service. Today, we serve 1.4 million consumers throughout 48 States.

In my testimony today, I would like briefly to address two problems, Mr. Chairman, that were not addressed by the Satellite Home Viewer Improvement Act last year. The first problem is the unavailability of local TV service in rural America. The second is the lack of competition to cable. I would like to propose a satellite solution to both problems, and I would like to suggest that it will require your assistance in the form of a Federal loan guarantee.

Last year's bill did pave the way for the satellite industry to become a meaningful competitor to cable in some of the Nation's top markets. I brought with me today a map which shows approximately 40 markets that will be served by DIRECTV and EchoStar, which is the best estimate we have today for extension of service.

You will note, I hope, that this leaves out more than half of the population of America. There are 20 States, in fact, that have no signal and eight of those States are States represented by Senators here on the Committee. There is no reason that these constituents should be left out or disenfranchised from the benefits of the modern information age.

Satellite technology can help us resolve this problem. Satellite technology, unlike other technologies, is "distance insensitive." Satellites can go places that cable and other broadcast technologies will never go. In fact, any technology, I would suggest, other than satellite is going to provide only a piecemeal or partial, ineffective approach as a tool to extend service to these remote locations. Furthermore, I would suggest that every cable customer in America needs a choice of service providers, and satellite technology can provide that choice. That's why Congress passed the satellite bill last year, because satellite holds the promise to serve everyone and to provide much-needed competition to cable.

Mr. Chairman, last year during this debate, you said that there are some social goals that are not necessarily met by market forces. We believe that's true here. There are problems that cannot be fixed because, in this case, the money cannot be made in delivering local satellite TV signals to these remote rural areas.

I would like to suggest that getting this job done will require a Federal loan guarantee of at least \$1.25 billion, and that will have to be supplemented with additional funds supplied by the satellite industry.

We also strongly recommend that any loan guarantee program be implemented on a not-for-profit, and preferably a cooperative basis. A not-for-profit approach would provide and ensure that the Federal loan guarantee funds do not enrich any large corporations or private interests. In fact, the utilities we work with have used loan guarantees for 30 years to provide electric and telephone service to these remote areas of the country and the program administered by the U.S. Department of Agriculture under the Rural Utilities Service has done a very effective job over the last 60 years in implementing those programs.

We also want to urge you to establish some strong criteria to ensure that any loan guarantee will be repaid. But we should also offer that preferences should be given to those plans which will provide the most comprehensive solution to getting the job done. That way, the Federal loan guarantee has the most benefit to the broadest number of people.

Mr. Chairman, I want to be clear as well that we believe this plan is going to require more than just assistance in terms of financial support. We are going to need satellite spectrum and satellite orbital locations, as well as some good industry cooperation to get this job done.

We are committed to that and we believe it is worth the effort because of your constituents' and our constituents' desire to have local signals through their satellite systems. That's why they called and wrote to you last year, and I believe they are still waiting for that solution.

Mr. Chairman, we want to work with you and the Members of this Committee to draft a technology solution. We believe satellites should be chosen to deliver local television signals to these rural and remote locations, as well as to provide meaningful competition to cable.

Thank you very much.

Chairman GRAMM. Thank you, Mr. Phillips.

Mr. Moskowitz.

**OPENING STATEMENT OF DAVID K. MOSKOWITZ  
SENIOR VICE PRESIDENT OF LEGAL AND  
GENERAL COUNSEL, SECRETARY, AND DIRECTOR  
ECHOSTAR COMMUNICATIONS CORPORATION  
LITTLETON, COLORADO**

Mr. MOSKOWITZ. Thank you, Chairman Gramm, Senators Enzi and Allard, both of whom we consider home State Senators, and other distinguished Members of this Committee. Thank you for inviting me here to testify.

My name is David K. Moskowitz. I am Senior Vice President of Legal and General Counsel, Secretary, and a Member of the Board of Directors of EchoStar Communications Corporation, based in Colorado. EchoStar's founder, Charlie Ergen, had a vision of a dish in every home, school, and business in the United States. In fulfillment of that vision, we have launched five high-power direct broadcast satellites since December 1995, and we have another satellite scheduled to launch this spring.

Our goal has always been to provide competition to cable so subscribers have an alternative to the high prices and historically poor

service provided by the monopoly cable company. Last year, Congress took what is, in my view, a tentative first step toward giving DBS the right to compete with cable on a more equal footing when it passed the Satellite Home Viewer Improvement Act of 1999. The success of the copyright license given in that bill will turn entirely on its implementation. If broadcasters are allowed to exploit their monopoly power in each local market without clear restraint, the goal of effective competition will not be met.

Although my company will be able to provide over 50 percent of the U.S. population with all of their local channels by satellite, the constraints on DBS capacity and prohibitively high costs make it impossible for EchoStar to carry all 1,600 channels nationwide. We currently offer about 100 television stations in over 20 markets around the country and plan to retransmit approximately 70 additional channels over the next several months, for a total of over 30 markets served by the end of the first quarter of this year.

Cable TV passes over 90 percent of the U.S. population today. If the goal of a Government loan guarantee is simply to provide access for rural subscribers to their local stations, then only 3 percent of the U.S. population is at issue here. The bigger problem, however, is the lack of competitive choice. A substantial percentage of Americans have access to local channels through their cable system, but they do not have competitive choice. With the appropriate legislation, and vigilant implementation of the existing laws by the FCC, EchoStar can offer true choice for all rural viewers. The rural funding mechanism should, accordingly, be based on the fundamental policy of ushering in, and bolstering, competition to cable, telephone companies, and all other incumbents. Without choice, cable subscribers in rural areas will surely become victims of even deeper price gouging and poorer service by their local cable monopolists, and the "digital divide" will deepen.

In that respect, we were disappointed to see in the final days of the last congressional session that the criteria for loan guarantees would have included incumbent cable and phone companies. This would be a mistake, if the ultimate policy goal is to provide equality for rural and city consumers alike.

One of the primary obstacles Congress faces in providing equality to rural consumers is the must-carry requirement. No single provision of the Satellite Home Viewer Improvement Act hurts rural subscribers more. For every must-carry channel, our ability to extend local programming to additional markets is reduced by one channel. While neither EchoStar nor DIRECTV can, at this time, serve every market, many more of your constituents could receive local channels absent must-carry provisions.

To be more specific, for EchoStar, the must-carry provisions will mean that we serve 33 markets instead of 60. Twenty-five percent of the U.S. population will miss out on fully effective competition as a result, a direct result, of must-carry provisions. When must-carry becomes effective, the additional 30 channels we will have to carry in New York and Los Angeles alone will mean that six more markets are deprived of full competition to cable.

Must-carry is a law that was imposed on cable because of its monopoly status. EchoStar is not a monopoly. Unless must-carry is eliminated, your constituents will suffer because of a law that, in

contrast with cable must-carry, does not resolve any competitive problem.

Now, in addition to legal hurdles, there are technological issues that must be addressed as well. Some have suggested that the reason EchoStar and DIRECTV are not serving rural areas is purely economic. The economics are indeed troublesome, but the technical hurdles are daunting.

The FCC must identify additional spectrum for the carriage of local stations. There simply is not enough right now. I will not bore you with the technical mumbo jumbo, but once spectrum is identified, the physical location of a satellite to provide service must be compatible with both EchoStar and DIRECTV as well.

There is also the issue of encryption. EchoStar and DIRECTV use different systems, and any solution must address this issue. We must work with mutual cooperation.

Congress must also tackle the tough question of economic feasibility that lies at the heart of financial support. From EchoStar's perspective, there is a very real issue of whether DBS providers can expect to derive enough revenue from providing local channels in rural areas to make a return on their investment. If EchoStar cannot answer this question affirmatively, the investment community will simply refuse to finance the construction of additional satellites, regardless of loan guarantees. Government loan guarantees cannot change fundamental economics.

The solution to full competition cannot, in our view, lie exclusively with Government guarantees. Whether the ARC's model in Alaska or Internet video-streaming models of the future are an issue, a realistic solution will require creativity as much as it will require loan guarantees. We challenge the broadcasters to invest themselves in serving rural customers and to work creatively on ARC's, Internet, and other solutions beyond simply spending taxpayer dollars.

Thank you for inviting me here to testify. I look forward to answering your questions.

Chairman GRAMM. Thank you.

Mr. Cox.

**OPENING STATEMENT OF STEVEN J. COX  
SENIOR VICE PRESIDENT  
DIRECTV INCORPORATED, EL SEGUNDO, CALIFORNIA**

Mr. Cox. I want to thank you, Mr. Chairman, for inviting me to appear before the Committee today. I appreciate the opportunity to present DIRECTV's views on this issue.

DIRECTV has not historically had much business in front of this Committee, so you may not appreciate how extraordinary it is for me to say that I concur almost 100 percent with the comments expressed by my sometimes friend, Mr. Moskowitz, of EchoStar.

[Laughter.]

DIRECTV has experienced tremendous growth since its inception 5 years ago, and is today the leading provider of direct broadcast satellite (DBS) service in the United States with more than 8 million subscribers.

We're grateful to Congress for passing the Satellite Home Viewer Improvement Act. While we did not agree with every provision of

that bill, it did allow satellite companies, for the very first time, to begin offering local broadcast channels and to begin offering consumers a service which is fully competitive with cable television.

We have moved quickly to bring the benefits of that legislation to consumers. We have publicly committed to make local channels available to at least half of the Nation's television households—about 50 million households in total. As of today, we are offering local channels, together with a national PBS feed, in 19 major metropolitan markets. By the end of the first quarter, as we continue to add additional markets to our roll-out, we will have substantially met our 50 million household commitment.

This hearing today is focused on those communities we are unlikely to serve with local channels, and the potential role of Federal loan guarantees in expanding this critical element of satellite television. From DIRECTV's perspective, our ability to broaden the delivery of local channels will not be limited by access to capital, so while the availability of loan guarantees may create incentives for some entities to develop local channel offerings, DIRECTV's ability to expand the benefits of competition to additional communities is being hampered by more fundamental legislative and regulatory obstacles. Specifically, the biggest impediment, as Mr. Moskowitz indicated, to serving additional communities is the "must-carry" requirement imposed by the recently enacted satellite bill. Even absent that constraint, we are ultimately limited by the spectrum allocated to us by the FCC. I would like to briefly explain those problems.

The must-carry provision, enacted into law last November as part of the satellite bill, requires us no later than January 1, 2002, to carry every full-power local broadcast station in each market in which we offer any local channels. For example, in both New York and Los Angeles, we could be required to carry up to 23 stations. The practical implications of this requirement are clear. By imposing a must-carry obligation, a policy decision has been made that it is much more important for us to carry all 23 local stations in New York and all 23 local stations in Los Angeles, than to offer the residents of communities such as Buffalo, Harrisburg, Louisville, Omaha, or Providence even a single channel of local content.

For the delivery of local channels by satellite to expand, the imbalance reflected by that policy decision must be addressed. Even if we were to get relief from the must-carry obligation, we would still not have sufficient available capacity to provide local channels in all 210 television markets. As a result, we would urge Congress to direct the FCC to make additional spectrum available to the DBS providers, which could be used to bring local channels to those markets we cannot service with our existing limited capacity.

I would point out that more than 2½ years ago, DIRECTV filed a petition for rulemaking seeking additional spectrum to expand our channel capacity. Unfortunately, that petition has sat at the Commission without action. If that petition were to be granted, it would allow both DIRECTV and EchoStar to gain access to additional spectrum which could be used to serve additional markets with local channels.

As I indicated at the outset, the presence or absence of a Federal loan guarantee program will not directly impact DIRECTV's incen-

tive or ability to expand the delivery of local channels. Should Congress decide, however, that a Federal loan guarantee program is desirable, I would offer the following comments. First, we believe that a fundamental premise of the recently enacted local-into-local legislation is that many consumers do not find the delivery of local channels via a separate delivery mechanism, such as an over-the-air television antenna, to be the equivalent of a single delivery mechanism, such as that used by cable operators, to deliver both local channels and national programming. Thus, only the satellite delivery of local channels, in a manner that is compatible with the existing DBS services, will meet the expectations of consumers who are either unwilling or unable to put up an over-the-air television antenna and will ensure that urban and rural consumers have equivalent competitive video delivery choices.

Second, to the extent that Congress decides to create a Federal loan guarantee program, we believe that taxpayer funding should be used to complement, rather than compete with, service already being provided without the benefit of taxpayer subsidies. In other words, we feel the program should be tailored to ensure that funds are used to provide local channel service only in markets where the existing DBS providers are not providing that service.

The ability to expand local channels is a vital factor in ensuring the continued growth of satellite as a viable competitor to cable. We look forward to working with Congress to advance these important objectives.

Thank you again for providing me the opportunity to testify.

Chairman GRAMM. Thank you, Mr. Cox.

What I would like to do, since we have a second panel, is to get Members to rigidly adhere to the 5-minute rule. If someone will turn on the green light, I will start by doing that myself.

First of all, let me thank everyone here for their excellent testimony. I think it is obvious that there are issues in the whole area of satellite and television broadcasts that Congress will be dealing with for a long time. Obviously, we have a difference of opinion on must-carry. I would have to admit that it's hard for me to understand, if you have a station in New York that nobody watches and that nobody is going to watch even if we put it on every satellite in America, why I can't get ABC football in a small rural area as a result of someone else getting some TV station in New York that nobody watches.

But the point is we are here as the Banking Committee to deal with the loan guarantee. Let me make it clear that if we are going to have any hope of passing a loan guarantee, these are issues that we are going to have to leave to the Commerce Committee and then, ultimately, to our role as individual Members of the Senate. Our focus on this bill, at least as it comes out of this Committee, and hopefully as it is dealt with on the floor of the Senate, is going to be on the loan guarantee. Let me ask a few questions about the loan guarantee.

In looking back at the last 75 years of loan guarantees, in looking at those that have been successful and those that have been unsuccessful—and I define success as two things: one, it achieved the objective that the loan guarantee was written for; and two, the money was paid back—there is a pattern to the ones that work and

the ones that don't. I believe it is clear, at least in beginning to think about this, and I hope to involve every Member of this Committee and every Member of the Senate who is interested, that one of the things we want to do, rather than having a merry-go-round process of numerous new bureaucracies and Government agencies, is establish an oversight board.

My thinking is that we should have the Secretary of the Treasury designate someone from the Treasury whose primary function is the credit function within the Government, that we should have the Chairman of the Board of Governors of the Federal Reserve System, Alan Greenspan, appoint a representative. I assume that would be another Member of the Board of Governors. Their role would be to look at the economics of both the proposal and the repayment of the loan.

You would want a third member on the panel. It's less clear to me who that should be. I think you could argue that it should be someone from the Department of Commerce or the Federal Communications Commission. You might argue that it should be someone who is involved in some area of Government that is focused on rural areas, such as the Department of Agriculture.

I would like to hear briefly from each of our panelists, starting with you, Mr. Yager, about what agency of Government the board members should come from. From the point of view of the legal structure of the board, it would have to be someone in Government. Within that constraint, let me quickly run through the panel.

Mr. YAGER. I think your suggestions are excellent and I would heartily endorse the Secretary of the Treasury appointing someone, the Chairman of the Federal Reserve appointing someone, and the Department of Commerce appointing someone to that board.

Chairman GRAMM. Mr. Sjoberg.

Mr. SJOBERG. I believe your suggestions are right on target. The third member of the board should be someone who has knowledge in all of the different diverse systems that could provide this service, someone or some agency that would have knowledge in broadcast television, in DIRECTV and EchoStar DBS services, someone who has knowledge in cable television, in translators, and in other alternative methods of providing this service.

Chairman GRAMM. Mr. Phillips.

Mr. PHILLIPS. Mr. Chairman, I believe if this board is to be appointed and a third party added, the appropriate party in my mind would be someone under the U.S. Department of Agriculture, primarily the RUS. They have a 60-year history of implementing loan guarantees and loan programs to extend service, which includes telecommunications. They have expertise in this area. They have a track record of success.

I might add that they also have the administrative staff to administer the program at the board's direction. I believe that's very important. It is important that we consider how it would be administered, as well as who would provide the final approval.

Mr. MOSKOWITZ. Mr. Chairman, I agree with Mr. Sjoberg, that the third member needs to be someone with a technical expertise and knowledge of the broadcast industry, of the satellite industry, and of how the copyright process works as well.

Chairman GRAMM. Mr. Cox.

Mr. COX. Once again, mirroring Mr. Moskowitz' thoughts, if one of the key issues you are trying to address, if one of the key issues you are trying to make sure is addressed by this program, is economic feasibility and reducing the risks to the taxpayers footing the bill, then someone is needed who understands the technical challenges that Mr. Moskowitz alluded to in his testimony. It could be someone from the FCC. It could be someone from the NTIA.

I believe there are several agencies that we have spent a lot of time with over the years addressing this very issue and the economic challenges associated with it.

Chairman GRAMM. Senator Sarbanes.

#### **OPENING COMMENTS OF SENATOR PAUL S. SARBANES**

Senator SARBANES. Thank you, Mr. Chairman. First, let me say on behalf of my colleagues, I believe there are a few more Members that will hopefully arrive here shortly so we will be able to begin the nomination business. I wasn't here at the outset. I apologize for that. I certainly will review the testimony of the panel. I simply wanted to make a few observations.

I believe it is appropriate for the Government to undertake the burden of working with private sector partners to make sure that all Americans have access to the latest technology. Actually, there's a fairly well-established principle of universal access to new technology. We did that with electricity, we did that with telephones, and I believe we should apply the same principle here as we move into an increasingly electronic age.

Obviously, we are going to have to look at the risk parameters. We need to be able to assure ourselves that we are not taking a needless risk and that what we're looking at is a worthy candidate for guarantees. But I think we need to move forward. I know for many of my colleagues from the more rural areas of the country, this is a very pressing issue. I think we need to address it.

I appreciate the Chairman's commitment to move legislation out of this Committee, as I understand it, within the next 60 days. We will work through this very carefully, and hopefully come up with a piece of legislation that everyone can agree with.

I believe that the least-served areas of our country, particularly the rural areas, should have access to the same technologies as the more urban areas. I look forward to working with my colleagues to achieve that objective.

Thank you very much, Mr. Chairman.

Chairman GRAMM. Thank you, Senator Sarbanes.

Senator Bunning.

Senator BUNNING. Thank you, Mr. Chairman. Let me try to find out from the panel here the technical problems that exist. I had to meet with 40 constituents. That's why I started with you, left, and came back.

Senator SARBANES. It wasn't anything you said that drove him from the room.

[Laughter.]

Senator BUNNING. No, it wasn't, believe me.

[Laughter.]

What technical problems are DIRECTV and EchoStar encountering in adding local broadcast signals to their programming?

I'm in the Greater Cincinnati broadcast area. I have DIRECTV. They do not cover my local channels, but I can pick my local channels up by simply placing rabbit ears on my set. If you move just 20 miles to the south, you cannot do that. Why can't you pick up the local channels in the same manner? What technical problems are we looking at in order to be able to pick up a local signal from DIRECTV or another competitor?

Mr. COX. I believe there are a few key issues which must be settled before you could even begin to formulate a plan, the first of which is clearly access to spectrum. There are 1,600 and some local channels in the United States today. We have satellites with the capacity to carry a couple hundred channels.

Even as we advance our technologies and begin to develop more efficient uses of our spectrum—such as the spot-beam satellite, which lets you reuse certain frequencies, if you will, around the country; adding additional satellites, as both of our companies have done in the last year; improving the compression, which, in essence, lets you get more channels out of a satellite—even with all of those evolutions, you do not get in any foreseeable time frame that anyone can predict, anywhere near the amount of capacity you would need to deliver those 1,600 channels that essentially blanket the United States.

The secondary issue——

Senator BUNNING. Excuse me.

Mr. COX. Sure.

Senator BUNNING. That is not what I'm asking. My question is: Why can't you get on DIRECTV, or a competitor of DIRECTV, a local channel? In other words, why can't you get the Greater Cincinnati channels in the area that they now serve? I don't care that they would be available in California or in New York. I don't want New York's local channels. I want either Louisville, Lexington, or Cincinnati's local channels. What are the technical problems that exist in accomplishing this?

Mr. COX. Louisville and Lexington coming into Cincinnati is actually a legislative problem more than a technical one.

Senator BUNNING. No, I'm located in Kentucky, but I receive the broadcast signals of Greater Cincinnati.

Mr. COX. We can by law only serve channels from a particular market back into that market.

Senator BUNNING. That's fine.

Mr. COX. If you are in Kentucky, you can get Louisville stations if we were delivering Louisville. The technical problem is, at some point after you start serving the top markets, you run out of capacity to be able to bring channels into markets that are further down the population scale.

From an economic standpoint, we're obviously motivated to bring local channels to places where you have the highest ability to drive the highest number of subscribers as capacity——

Senator BUNNING. Let me take the top 20 markets. There are how many channels in each of those 20 markets if we take all the channels that are available, not counting cable? Counting just the network channels, how many are available?

Mr. COX. Counting only the network channels, there is ABC, NBC, CBS, and Fox in each of those markets.

Senator BUNNING. That's four.

Mr. COX. Then, there are probably as many as 20 additional channels, and some of those channels that we have to be prepared to carry in 2002, by virtue of the must-carry obligation, and anywhere down to—

Senator BUNNING. You are talking about educational television, public television, and all of the things that are local?

Mr. COX. I'm talking about independent stations. It would be the whole gamut, from foreign language programming to religious programming to home shopping to any number of things that we actually carry on a national basis.

Senator BUNNING. You still haven't answered my question. What are the technical problems in picking up four Louisville stations on DIRECTV and broadcasting them in Kentucky? What are the technical problems if they already have ABC, CBS, NBC, and Fox?

Mr. COX. There is nothing that technically precludes us from doing that, other than for every four additional stations we put up, we are either running to the end of the spectrum we have or taking four other stations down.

I am still not sure if I'm—

Senator BUNNING. You are running to the end of the spectrum or taking other stations down when you supposedly have 900 or almost 1,000 channels on DIRECTV?

Mr. COX. We actually have about 210 channels we deliver on a national basis and we have now committed close to 100 additional channels for local. In the most aggressive scenario, 900 or 1,000 channels is nowhere on my radar from a capacity standpoint.

Senator BUNNING. No, but you do have that many channels on your—

Mr. COX. We have channel spots on there.

Senator BUNNING. Yes.

Mr. COX. But we do not have the capacity to fill all those spots today, Senator.

Senator BUNNING. But you're having problems with adding four additional channels?

Mr. COX. We have problems once we get beyond a fixed number of channels in that we either have to find new ways to get capacity or take channels down.

Having launched today in the approximately 20 to 25 markets we have launched in, we have room to add a few more markets and then we will—

Senator BUNNING. What are you going to do in 2002 when you must carry?

Mr. COX. In 2002, we are building and launching what is called a spot-beam satellite, which will allow us to more efficiently use spectrum—I don't want to get overly technical—by taking the frequencies we have and reusing them in spots around the country, rather than delivering every channel on a national basis as we do today.

We believe, and we're working pretty hard at it, as you can imagine, that satellite will allow us to deliver, if we are required to, the 300 or 350 channels that those 20 markets represent in 2002, as compared to the 80 channels that are represented today.

Senator BUNNING. Thank you.

Mr. PHILLIPS. Senator, may I add a followup in answer to your question?

Senator BUNNING. Sure.

Mr. PHILLIPS. I think something was missed there. The point I would like to make is it's not a technical problem. The real reason behind the problem of providing local channels is the spectrum that both of these competitors have is being used to serve those markets where there's more people and both companies are duplicating the use of the spectrum.

Senator, in regard to the question as to the FCC being a proper party for an oversight board, I would suggest that it would be totally inappropriate to have them on the panel for this reason. As Mr. Cox said, the FCC has not acted on applications to make more spectrum available. They did not even act to limit this from happening to make it possible to use the spectrum to extend service.

The FCC has advocated that a position of competition will take care of everything. Furthermore, the FCC has regulation over these competitors for orbital locations and spectrum. They should not sit on the same board that is going to judge the loan guarantees. I believe it should be another independent party.

Senator BUNNING. Thank you, Mr. Chairman.

Chairman GRAMM. Senator Johnson.

Senator JOHNSON. Thank you very much, Mr. Chairman. This is a matter of significant import to my home State of South Dakota. You only have to look at the map here to understand why. Of the 214 television markets in the United States, my two markets are Sioux Falls, 109, and Rapid City, 174. With the current effort serving only the top 30 markets, this is a matter of great concern.

I am not particularly wedded to the administrative details of how to go about this, other than to understand that we do need a loan guarantee program of some kind and we need to move expeditiously in that direction.

Mr. Phillips, I was intrigued with your observations on how to administer this program, whether to have the Rural Utilities Service, for instance, involved in the administration. Last year, we were accused sometimes of promoting corporate welfare and matters of that sort. It would seem to me there is a case, a strong case, that could be made that the RUS, or even the NTIA, has greater expertise in rural America and this type of technology. The RUS currently administers electric and telecommunications utilities.

I know that you commented briefly to the Chairman's question to the panel on this. I wonder if you would elaborate a bit more on the logic about why you believe that would be the appropriate institution and the disadvantages of other options.

Mr. PHILLIPS. Thank you, Senator. I would be glad to.

The Rural Utilities Service, formerly the REA, has been administering loan programs and loan guarantee programs since 1935, and has in fact allowed billions of dollars to be utilized to fulfill the public interest of extending electricity and telephone services in areas that are underserved or unserved.

It seems to us that the issue we have before the Committee here today is exactly the one that was before Congress in the last decade when we had a challenge of serving unserved markets. The RUS understands the challenge. They have the administrative people on

their staff, they have the technical people on their staff, and they have the ability to administer loan programs and loan guarantee programs. They have a proven track record.

In fact, they do work in telecommunications and they understand the interests of broadband technologies that are land-based versus, say, the benefits of satellite technology. They have the expertise in those areas as well.

I think the Committee will be hearing from Christopher McLean and I believe he could add to that as well. I believe his testimony indicates that there would be no further administrative burden in having the RUS take on this responsibility because they're already staffed and able to take it on.

Senator JOHNSON. One of the greatest concerns that Members in general are going to have, particularly Members new to this issue, is potential defaulting on loans and potential taxpayer liability.

Are you comfortable that this kind of administration is up to making certain that this type of liability in fact would not occur?

Mr. PHILLIPS. Yes, sir, I am. Prior to working at the NRTC, I worked as an attorney and had the opportunity to work with the RUS on many of these issues. I had the opportunity to deal with payment problems where the loans had to be restructured and other issues like that. I worked with Congress, in fact, to deal with issues of subordination and other things that were mentioned here.

I'm very comfortable that the RUS has the most experience and the best track record based on the largest portfolio of loan guarantees that exists.

Senator JOHNSON. Thank you. I yield back my time.

Chairman GRAMM. Senator Allard.

Senator ALLARD. One question that frequently comes up on loan guarantees, no matter what they're talking about, is this: If you can't afford to do it without the loan guarantee, how do you plan to pay off the loan?

I would like to have each of the panel members discuss that question. We will begin with you, Mr. Yager.

Mr. YAGER. Thank you, Senator. I believe the real problem we have here is a short-term versus long-term proposition. In today's economic climate, investors are looking for very short-term returns in the commercial markets. We are a highly leveraged company and when we borrow money from banks or from insurance companies, the question is always how quick is the return going to come to us?

I think over a period of time you will find that the rural satellite program will pay off. It will not have the same rates of return that they are talking about in the major markets, but long term, it is a good investment.

Senator ALLARD. Maybe I should have added this as a part of my question. In the technology arena, we have people who have high-tech equipment saying it is outdated in 3 years. You are talking about long term. How do we assure these loans long term if we have technology that outdates equipment?

Mr. YAGER. I believe long term today is something like 5 years, plus. When I started in this business, long term was 15 years, plus, in technology, but today, long term is 5 years, plus.

Senator ALLARD. In any case, that's shorter than the loan period.

Mr. YAGER. Right. I would have to defer to my colleagues from the satellite industry here, but I think DBS-1 has another 8 years left on it, and it's been up for 7 years, so the life of a satellite is about 15 years.

Mr. COX. Yes, 12 to 15 years these days is not unexpected.

Mr. SJOBERG. My expertise is in land-based systems, cable TV and translator systems. The building of land-based systems is very capital-intensive. If you can lower the cost of capital, you can expand into lower density areas and serve people with the lower population densities.

What we would look at in our system is being able to expand into maybe the 7 to 10 range of homes per mile of cable plan. I believe a very significant benefit to consider is the side benefit that when cable is extended into these areas, these people will have access to high-speed cable modems, which will then allow the growth of some e-businesses and other factors like that.

In the rural areas that we serve, I believe that's significant. The rural areas are losing population. People are leaving the rural areas and moving into the cities for better jobs. Oftentimes, if they had access to high-speed cable modems and services like that, they would be able to stay in the rural areas and telecommute. I believe that's a very significant benefit.

Mr. PHILLIPS. Senator, I would offer three explanations to assist. First, I believe there is a group of potential subscribers in these markets that are not served who have not bought satellite technology because it does not carry their local channels. If you would offer their local channels, they would subscribe and they may also be willing to subscribe to additional video services. There would be a return there that would lift and help the economics of the business plan.

Second, as just mentioned, you could add to satellite technology a common platform that could deliver both video and Internet or data services. There would be additional benefit to the business plan for local-into-local perhaps if other services like data could be offered on the same technology platform.

Third, a loan guarantee, as I suggested, should probably go to a not-for-profit entity. The reason for that is if you offer a loan guarantee to a not-for-profit entity, that entity does not have to make the higher returns that are expected for shareholders. The entire loan guarantee can be utilized on a break-even proposition.

In fact, the gentleman from the broadcast industry suggested that this might be done on a wholesale level. I agree with that. A cooperative type enterprise within the industry could be formed on a not-for-profit basis to do this very cost effectively and allow the retailing to take place at another point.

Mr. MOSKOWITZ. Senator, EchoStar would love to see anything that would help more consumers have their local channels available by satellite as an alternative to rising cable rates. But I would be remiss if I did not tell you that we are very concerned about whether the economics work with or without the loan guarantees, especially in the smaller markets. I believe the economics by themselves are suspect. If all you do is pass a loan guarantee without tackling some of the other issues that surround this, I think things could come back to haunt us in the future.

I believe this is going to be an issue which requires creativity and cooperation. It is going to require broadcasters, potentially in the smaller markets, to agree to share time on a satellite, like they do with the ARC's in Alaska, as opposed to carrying every station in every market 24 hours a day, 7 days a week.

You need to take a hard look at the economics of that and determine whether the taxpayer is ever going to see their money back.

Mr. Cox. I would concur with Mr. Moskowitz. We have done a tremendous amount of looking at exactly this issue—how do we take this proposition and expand it as far as we possibly can?

The early results we have received from the markets we have launched local channels in have been tremendous. Consumers are extremely excited about it. It actually feels for the first time as if there is a true competitor to cable, which consumers have not had in the past.

The very fixed cost that Mr. Moskowitz is referring to, the cost of getting those signals from a market back to our broadcast centers, is hundreds of thousands of dollars per year. The opportunity cost of allocating more and more spectrum when it could be used for other revenue-generating purposes is also challenging.

I believe some level of partnership with the broadcast community will be required in terms of addressing some of the fundamental ways we have done business together historically. I believe an examination of some of the issues that I understand are outside the scope of this hearing is also required: in general, the regulatory regime under which we operate.

Senator ALLARD. Thank you, Mr. Chairman.

Chairman GRAMM. Thank you, Senator Allard.

Senator Grams.

#### **OPENING COMMENTS OF SENATOR ROD GRAMS**

Senator GRAMS. Thank you very much, Mr. Chairman.

I welcome all of the panelists here today and thank you for your testimony. In particular, I want to welcome Mr. Sjoberg from Minnesota. Thank you for taking the time to be here.

I have a lot of questions. I would like to submit most of those to you in writing, if I could, because there are a lot of details that we need to know that we won't have time to ask.

As you look at the map, my State abuts both North and South Dakota. The rural parts of Minnesota face some of the same problems as do the rural areas of North and South Dakota, and that is problems obtaining access to their local channels.

Mr. Sjoberg, if Congress were to pass a loan guarantee program, which I think you advocated should be technology neutral, how would a cable operator use the available funds to extend the availability of its local broadcast signal?

Mr. SJOBERG. Well, as I said earlier, the building of cable facility is very capital-intensive. The Federal loan guarantee would provide a lower interest rate. That lower interest rate would lower our capital costs and allow us to go into areas of lower density.

I also believe, with the loan guarantees in place, there would be other partnerships, as the partnership I described with ourselves and Roseau County and Lake of the Woods County. These are two very rural counties which had explored the possibility of building

their own transport system to bring these signals, in the case of Lake of the Woods County, nearly 200 miles.

By partnering with us and using our transport system, we were able to reduce their costs by about 90 percent, at the same time producing very good coverage within the counties. At present, we have continued the partnership with them for over 10 years. Their maintenance costs have also been significantly reduced. They are very happy with the program.

Senator GRAMS. Mr. Sjoberg, economics is going to dictate quite a lot of this. Would the small cable operators have enough of a subscriber base to repay these loans if they qualify for them?

Mr. SJOBERG. Yes, they would, because they would use the funds to go into areas which would allow them to reach these pockets of homes that maybe aren't economically feasible to reach at market or above-market rates, the rates that we're paying for capital now.

The combination of that and new services, like high-speed cable modems, which are coming online, will be an additional source of revenue for the cable company and also an additional service for the customer.

Senator GRAMS. Mr. Moskowitz and Mr. Cox, you talked about economics. Mr. Moskowitz, you said that economics won't be the only criteria. Could you tell us, in more detail, what other things have to be done as far as regulation or whatever to make it not only economic, but feasible?

Mr. MOSKOWITZ. Thank you, Senator. I would be glad to. I think at the top of the list has to be must-carry. If we have to carry 25 or 30 stations in a top market, including the Home Shopping Channel, which is the same in all DMA's that it's provided in, then there are fewer markets that we can economically serve.

I believe, when you look at the detailed economics, the hundreds of thousands of dollars required to bring the signals of a small local market back to an uplink facility and up to the satellite, and the spectrum required to provide those signals to consumers, results in a price point which is economically discouraging. In order to have a model that works, we need to look at some steps we can take, like in smaller markets having—again, like the ARC solution in Alaska—the ABC, NBC, and CBS station share time each day. You get a portion of the ABC, a portion of the NBC, and a portion of the CBS local programming, so consumers can indeed have their local news, weather, and sports, and locally produced content, but at a more economically attractive rate. I believe those are the types of things that need to be considered.

As far as providing loan guarantees to a cable company, the fact of the matter is that to provide service to small rural areas, satellite is a much more cost-effective point-to-multipoint distribution system. I question whether Congress should be in the business of supporting economically less viable systems or whether it should merely try to help do everything it can to assure service for all at the most economically attractive model.

Senator GRAMS. I would like to ask all of you, beginning with you, Mr. Yager, just briefly, what the additional cost is going to be to the consumer, whether you're in a major market already receiving signals or in rural areas?

Mr. YAGER. Senator, it is my understanding that the charge to the consumer in New York and those markets that are already local-to-local is somewhere between \$5 and \$6. I believe the charge is actually \$4.95 to \$5.95. I would anticipate the price points would be the same for small markets.

Senator GRAMS. Besides the monthly fee, would additional equipment have to be purchased? Would there be initial costs?

Mr. YAGER. I am sure that there is a set top box that would be included in the installation fee that would go with it.

Let me just say that in the small- to mid-sized markets, we do not have 23 stations. We operate a station in Duluth, Minnesota. As you know, Duluth now has four stations. They just signed on a Fox station this year. It's a four-station market. We have a station in Colorado Springs, which is going to be a five-station market soon with the sign-on of a WB station.

We are not talking about 23 stations in the small- to mid-sized market. We are talking about a very limited number of network affiliates that provide local news, local information. That is what is so important about this hearing, local television.

Senator GRAMS. Does anyone else want to briefly answer that question on what the cost to the consumer would be? We will go right down the line.

Mr. Sjoberg.

Mr. SJOBERG. In our markets where we're doing the translator project, it is costing the typical resident of the county about \$10 per year. There is no additional receiving equipment needed. It is transmitted on UHF, so they only need a small antenna to be able to receive it. It will work on as many TV sets as they have and they are able to watch multichannels. One person in the house can watch ABC. The next person can be watching CBS. The next person can be watching Fox.

Senator GRAMS. Mr. Phillips.

Mr. PHILLIPS. The models that we have run look at a cost per consumer in these remote markets of between \$5 and \$8. You have to add to that the cost of the receiving equipment.

Today, that equipment is subsidized by many in the industry to get the system out there. But we believe to make a common receiving system so that spectrum isn't wasted as we're doing today with two competitors duplicating markets, we will have to have a box and a dish that's designed so that both systems can work to serve one consumer seamlessly. That probably adds, we estimate here, an additional \$100 to the receiving equipment.

Mr. MOSKOWITZ. Senator, we offer local channels today in larger markets for \$5 a month. We can make a return on our investment by doing so, although to some extent, it's a loss leader to simply duplicate the capabilities of cable. That assumes that we have tens of thousands, and perhaps upward of 100,000 subscribers in each of those markets at \$5 a month for break-even. Capital Broadcasting, Local TV on Satellite, projects about \$8 to \$9 a month. Again, that is in the larger markets.

If you are not amortizing your costs over tens of thousands, perhaps upward of 100,000 customers, you can't make the economics work at \$5 to \$8 a month. I hope that specifically addresses your question.

Mr. COX. We're at about the same point. We're at \$5.99 a month and we include a PBS feed as part of that. Similarly, we think in the larger markets, by a combination of driving a large number of subscribers to that, plus the additional revenues we may get from other services once we get a box in the home of those subscribers, the proposition is worthwhile.

It gets significantly more difficult as you get into the smaller markets and as you start anticipating the 2002 date of having to bring three, four, or five more channels into each of those cities.

Senator GRAMS. Thank you, Mr. Chairman.

Chairman GRAMM. Thank you, Senator Grams.

Senator Reed.

#### **OPENING COMMENTS OF SENATOR JACK REED**

Senator REED. Thank you, Mr. Chairman. I want to thank all of the panelists for appearing today. I thought the testimony of our first panel was very enlightening. I look forward to hearing from our second panel.

Thank you.

Chairman GRAMM. Thank you, Senator Reed.

Senator Hagel.

#### **OPENING COMMENTS OF SENATOR CHUCK HAGEL**

Senator HAGEL. Thank you, Mr. Chairman. I will submit a statement for the record. This is a very timely hearing. This issue is very important to people in my home State of Nebraska, and I appreciate your holding this hearing at this time.

Thank you.

Chairman GRAMM. Thank you, Senator Hagel.

Senator Shelby.

#### **OPENING COMMENTS OF SENATOR RICHARD C. SHELBY**

Senator SHELBY. Thank you, Mr. Chairman. I have no opening statement. I would just like to thank all of our witnesses for appearing today. The testimony of our first panel was very informational, and I look forward to hearing from our second panel.

Thank you.

Chairman GRAMM. Thank you, Senator Shelby.

Let me thank each member of the panel. It is hard to imagine a panel that could have done a better job of starting this discussion in the Banking Committee. I want to thank each and every one of you for coming.

Let me call our second panel. While they are coming up, I will introduce them. We have with us Gregory Rohde, Assistant Secretary for Communications and Information of the National Telecommunications and Information Administration at the U.S. Department of Commerce; Christopher McLean, Acting Administrator of the Rural Utilities Service at the U.S. Department of Agriculture; William Roberts, who is Senior Attorney at the U.S. Copyright Office; and Dale Hatfield, who is Chief of the Office of Engineering and Technology at the Federal Communications Commission.

Let me thank each of you for coming. I would like to ask each member of our panel to try to stay within 5 minutes so we will have plenty of time for questions.

With that, Mr. Rohde, let me call on you.

**OPENING STATEMENT OF GREGORY L. ROHDE  
ASSISTANT SECRETARY FOR  
COMMUNICATIONS AND INFORMATION  
NATIONAL TELECOMMUNICATIONS AND  
INFORMATION ADMINISTRATION  
U.S. DEPARTMENT OF COMMERCE**

Mr. ROHDE. Thank you very much, Mr. Chairman. It is a real pleasure to be here. Thank you for holding this hearing.

I would ask that my written statement be included in the record.

Chairman GRAMM. Let me say that everyone's written statement will be included in the record as if read in its entirety. If you could summarize your statement, it would be very helpful.

Mr. ROHDE. Certainly. Thank you very much.

I am pleased to be here. In fact, this is my first opportunity to testify before Congress since being sworn in as Assistant Secretary for Communications and Information. I remember well the evening I was sworn in. In fact, I was watching C-SPAN, watching you and Senator Lott, Senator Daschle, Senator Baucus, Senator Burns, and others discussing the unanimous consent agreement, of which the Senate had agreed to postpone consideration of the loan guarantee proposal until this year. That very night I walked into Secretary Daley's office to be sworn into my new position. I remarked to him how ironic it was that when my predecessor was sworn into the same job in 1993, there were no operational direct broadcast satellite systems providing services to consumers. Today, there are over 11 million consumers who are receiving DBS services.

The Administration strongly supported provisions in last year's legislation that provided the authorization for satellite providers to carry local-into-local programming. Since that time, DBS providers are providing local-into-local service in over 24 markets and are currently negotiating in 20 more. But the question still remains as to how viewers in the remaining 200 or more markets are going to receive local-into-local service over satellite or other technologies.

The Administration believes this debate is quite appropriate. It is welcoming that Congress is continuing the pursuit of this question as to how small and rural markets are going to receive local-into-local carriage of broadcast signals.

In regard to the loan guarantee proposal in particular, I would like to highlight three principles which the Administration would like to see considered as it develops. Let me emphasize that the Administration welcomes and looks forward to the opportunity of working with this Committee and other committees in Congress in considering this legislation.

First, should Congress consider a loan guarantee approach, it is very important that this approach be technologically neutral. It's important to keep in mind that different technologies may best be suited to deliver local-into-local service in different parts of the country. It is imperative that any loan guarantee approach or any loan legislation along these lines is technologically neutral. It's also important because we want to spur innovation. We want to be able to help foster private-sector innovation and be open to the possibility that there are other technologies that could be out there.

Second, any proposal should be one that promotes competition in the multichannel video market. With the new authorization for satellite carriers to carry local-into-local programming, the strength of the DBS providers to become an effective competitor to cable has been enhanced. As Congress considers further legislation in this area, we should keep in mind that one of the objectives should be to promote competition.

Third, it should be kept in mind that any new program should demonstrate fiscal responsibility by conforming to existing Federal credit program policies.

Among the principles that we feel any loan guarantee proposal should conform with is that we should minimize the Federal risk to the program. We should also recognize that, obviously, market-based solutions are the most preferred solutions, but they may not necessarily solve the issue. I believe those are very important principles to keep in mind.

Finally, I would like to point out that last week, I announced that the National Telecommunications and Information Administration is going to issue a notice in the *Federal Register* to solicit public comment on this question. The NTIA believes that this discussion should not be limited to simply examining the possibilities of one particular technology, that we should be looking at other possible approaches. In light of that, we are going to shortly issue a notice in the *Federal Register* to solicit public comments and suggestions as to how viewers in small and rural markets can receive local broadcast signals through a variety of technological means, including satellite.

All of these comments are going to be posted on our Web site as part of this process. In early March, I intend to host a roundtable discussion with various stakeholders in this debate—policymakers, consumers, industry representatives, and technological experts—to consider all of this.

With that, I will conclude my remarks. I see that the yellow light is on. I would be happy to answer any questions that you or Members of the Committee may have.

Chairman GRAMM. Thank you.

Mr. McLean.

**OPENING STATEMENT OF CHRISTOPHER McLEAN  
ACTING ADMINISTRATOR, RURAL UTILITIES SERVICE  
U.S. DEPARTMENT OF AGRICULTURE**

Mr. McLEAN. Thank you very much, Mr. Chairman. My name is Christopher McLean. I am the Acting Administrator of the Rural Utilities Service at the U.S. Department of Agriculture. We are the successor agency to the Rural Electrification Administration.

The Rural Utilities Service is a rural development agency. We administer a \$42 billion loan portfolio of more than 9,000 loans for telecommunications, electric, and water and wastewater infrastructure projects throughout rural America. Our agency administers the Distance Learning and Telemedicine loan and grant program as well, and is a leading advocate for rural consumers before Federal and State regulatory bodies.

For the rural residents of America, access to television signals has long been a challenge. Distance and geography have been very

significant impediments to the reception of consistently viewable broadcast signals. While cable television is available in many rural towns, it does not reach America's most rural citizens.

The Rural Utilities Service has a 65-year record of empowering rural America and meeting major infrastructure challenges. Just this last October, the Rural Utilities Service telecommunications program celebrated its 50th anniversary. In those 50 years, our telecommunications program has helped close the digital divide in rural areas and has maintained an unprecedented level of loan security over the entire history of the program. And, knock on wood, we have not had a write-off in our telecommunications program in that 50-year history.

Since 1993, the RUS has financed more than \$1 billion in fiber-optic facilities and more than \$725 million in digital switching for the telecommunications companies and cooperatives serving rural areas. In 1999 alone, the RUS has provided nearly \$500 million in financing for rural telecommunications infrastructure.

The RUS is very fortunate to have an accomplished corps of engineers, accountants, financial specialists, and rural infrastructure experts. We also have a program delivery staff that is both in the field and in Washington, D.C. I'm very confident that the RUS has the necessary skills to administer new initiatives that will bring the benefits of the information revolution to all America.

Access to a full range of news, weather, sports, entertainment, and information is certainly important to maintaining and enhancing rural quality of life. But maintaining expanding access to local sources of news, weather, and information is also critical to rural public safety. Recent weather events, such as this month's back-to-back winter storms in the South and the East, highlight the importance of local television as a means of disseminating lifesaving information.

Linking local residents to their communities of interest is also important to maintaining and enhancing the vitality of the local rural economy, as well as the local rural and civic life. From both an educational standpoint and one of public safety, it is in the public interest that rural citizens have access to local and network programming. Rural America should not fall into a new digital divide: either as a result of the amendments to the Satellite Home Viewer Act or the coming conversion to digital television.

The conversion to digital from analog broadcast signals is going to raise special problems in rural areas because the propagation of signals under the digital mode is different than under the analog mode. Right now, as you move further away from a transmitter, analog signals will gradually fade out. Digital signals will generally drop off suddenly. There is a possibility that in rural America, once digital conversion is fully complete, rural viewers may lose access to broadcast signals they now have.

The Rural Utilities Service believes we have the infrastructure in place. We appreciate the comments of the Chairman that there is the desire not to reinvent the wheel or recreate a program delivery system. We believe we have the expertise available that can successfully administer a program of the nature discussed by Senator Burns, Congressman Baucher, and Senator Baucus.

In conclusion, Mr. Chairman, preserving and enhancing access to local and network television signals is important not only for rural quality of life, but for rural public safety and community. Linking rural viewers to more local signals will also enhance the economics of rural broadcasting and their rural advertisers. In addition, the infrastructure necessary to deliver local-into-local services, regardless of mode, can bring new broadband capacity to rural areas. Just as the Rural Electrification Administration helped rural America become part of the national economy, the Rural Utilities Service can continue to help rural America thrive in the information age.

Thank you, Mr. Chairman.

Chairman GRAMM. Thank you.

Mr. Roberts.

**OPENING STATEMENT OF WILLIAM ROBERTS  
SENIOR ATTORNEY, U.S. COPYRIGHT OFFICE**

Mr. ROBERTS. Thank you, Mr. Chairman. I'm Bill Roberts, Senior Attorney at the U.S. Copyright Office. I'm pleased to appear today on behalf of the U.S. Copyright Office to address satellite retransmissions of television broadcast signals.

Over the next several weeks, this Committee will be considering legislation to provide a federally backed loan guarantee program to build broadcast retransmission platforms in order to bring consumers located in smaller markets in the United States their local broadcast stations.

The purpose of my testimony is not to present the Copyright Office's position on the advisability of a loan guarantee program. We in fact do not have a position because that is not a copyright matter. The purpose of my testimony is to provide this Committee with a context in which these proposals have arisen.

The concept of a loan guarantee program—to provide rural subscribers with their local television signals—is an offshoot of last year's Satellite Home Viewer Improvement Act. The Satellite Home Viewer Improvement Act is the third major piece of legislation governing the copyright licensing of television broadcasting retransmitted by satellite carriers, such as DIRECTV and EchoStar, since the foundation of the satellite home dish industry in 1980.

Indeed, the congressional regulation of the satellite industry has come principally through our copyright laws. The copyright licensing regime for satellite retransmission of television broadcast stations is very similar to the licensing regime for cable systems. Both cable and satellite have what is known as a compulsory license, which allows them to clear all the copyrights to the programming contained on the television signals they choose to retransmit to their subscribers.

A compulsory license is a Government-created regime whereby the copyright owners of television broadcasting, such as sports, movies, and syndicated programs, are compelled to license their works under fixed terms and royalty fees, rather than negotiate those licenses in the free marketplace. Both the cable systems and satellite carriers submit compulsory license fees twice a year, along with statements of account to the Copyright Office for subsequent distribution of those monies to copyright owners of the programming that has been retransmitted by those satellite carriers and

cable systems. There is, however, one very significant difference between the cable and satellite compulsory licenses.

For satellite carriers, their compulsory license for retransmission of network television stations is limited to subscribers who reside in unserved households. An unserved household is one that cannot receive an over-the-air signal from a local network affiliate using a conventional rooftop antenna. The reason for the unserved household limitation to the satellite compulsory license is to protect the local network station from losing viewers in their market who sign up for satellite and watch a distant affiliate of the same network via their satellite dish.

The issue of determining when a particular household is an unserved household and hence, eligible for satellite retransmission of distant signals, has been troubling through the years and I'm sure that Members of this Committee have undoubtedly received angry letters from constituents who lost their satellite service as a result of the unserved household restriction. The problems of the unserved household restriction can be solved through the retransmission of local signals by satellite carriers. Providing local network signals eliminates the need to import a network signal of a distant affiliate from a distant market.

Recently, EchoStar and DIRECTV have announced that they now possess the technology to deliver local signals to their subscribers. Unfortunately, they have indicated that they do not have the capacity to deliver the signals of local stations to subscribers in all markets of the United States. However, the copyright licensing regime is in place, and that's due to the Satellite Home Viewer Act, which created a royalty-free compulsory copyright license for the retransmission of local signals. Consequently, as a result of the creation of this local signal license, all satellite carriers are now eligible from a copyright perspective to provide local signals to those people in rural areas of the country. This is why a federally backed loan guarantee program has been proposed: that is, to deliver or provide the actual means of getting the signal to the subscribers.

For a further and much more detailed background on the Satellite Home Viewer Improvement Act, I would ask you to refer to my written statement. I would be pleased to answer any questions that you or Members of this Committee may have.

Thank you.

Chairman GRAMM. Thank you.

Mr. Hatfield.

**OPENING STATEMENT OF DALE N. HATFIELD  
CHIEF, OFFICE OF ENGINEERING AND TECHNOLOGY  
FEDERAL COMMUNICATIONS COMMISSION**

Mr. HATFIELD. Thank you, Mr. Chairman and Members of the Committee. I greatly appreciate the opportunity to appear before you today. As you permitted, Mr. Chairman, I will submit my full testimony for the record and simply summarize some of the key technological points in the time that I have available. Before I turn to the substance of my testimony, I want to emphasize that the views I express here today are my own, and may not necessarily reflect the views of the agency I represent, the Federal Communications Commission.

Last November, Congress took a dramatic step to foster competition in the multichannel video programming distribution market and increase programming choices for U.S. consumers when it enacted the Satellite Home Viewer Improvement Act. Perhaps the key provision for purposes of today's hearing is that legislation's amendment of the copyright law to authorize satellite carriers to retransmit local television signals to all consumers in the station's local market.

As the Committee considers the critical goal of ensuring that rural America has access to local television signals, I would stress that this goal presents significant technological challenges. Local television markets vary greatly in size, for example, from the whole State of Utah, to much smaller areas in Laredo, Texas, or Salisbury, Maryland. Terrain varies also from the appropriately named Great Plains to the ruggedness of the Rocky Mountains, my home area, and to Appalachia. Different geographical situations in all probability will demand different technical solutions.

Fortunately, advances in communications technology provide a variety of options to address the goal of providing local broadcast service to rural areas. While no one technology may be able to solve the entire problem, multiple technologies can be used in combination to achieve that goal. I would like to discuss briefly seven such available technologies.

First, existing direct broadcast satellite, or DBS systems, such as DIRECTV and EchoStar, have begun to retransmit local programming, but only in the larger markets, as you heard earlier. Existing DBS systems were not constructed with the goal of providing local programming. However, and you have already heard some of this, the good news is that advances in spot-beam technology may enable future satellite systems to provide greater local coverage to rural America.

Second, the multichannel multipoint distribution service, or the MMDS, sometimes referred to as wireless cable, is a terrestrial fixed wireless service that operates in the 2.5 GHz range of the radio spectrum.

As suggested by its name, its uses include multichannel video distribution. Industry consolidation among MMDS providers, along with digital compression techniques, makes multichannel video distribution by MMDS providers even more practical. Nevertheless, many of the new owners of MMDS systems see Internet access as a more attractive offering than video distribution, calling into question the direction that the MMDS is currently headed.

Third, the local multipoint distribution service, or the LMDS, is a fixed wireless access system that operates in the 28 GHz range of the radio spectrum. Because of the high microwave frequencies involved, the range of the LMDS is limited to relatively short distances, a few miles, over unobstructed paths.

The initial focus of LMDS providers seems to be on serving urban business users. However, the LMDS may eventually find applications in smaller communities for broadband services, including two-way services, and also video distribution.

Fourth, TV translators are used to receive a television signal on one channel and retransmit it on another channel, thereby extending the coverage of the originating station into hard-to-reach areas.

These relays may be helpful in small towns and isolated areas where you have suitable locations for the translator. You have already heard a discussion about the use of translators as a means of bringing in signals.

Fifth, we sometimes forget about it, but a better performing TV receiving antenna system at an individual residence can be used to get better over-the-air coverage. In other words, by putting in a higher antenna, a larger antenna, something called a preamp, and so forth, you can actually extend the distance over which you can receive other local stations.

Sixth, there are two ongoing developments in cable television systems that may enable cable operators to make new inroads in rural areas. One, cable operators are using fiberoptic technology to upgrade and extend the reach of their facilities. Two, cable operators are attempting to transform themselves into being full-service providers. As the industry makes this transition and as consumer demand for advanced communications services grows, cable operators may have new economic incentives to extend coverage to rural areas.

Seventh, and finally, similar to cable companies, local telephone companies are also now employing fiberoptic technology to upgrade their systems, and increased demand for advanced services may provide comparable incentives for them to add video distribution to their package of services and to extend the reach of broadband facilities further into rural America.

In conclusion, let me again stress that no one technology holds the key to ensuring that local television signals reach rural America. Therefore, a policy of encouraging a wide array of technological options would be well advised, especially in an era of such rapid technological change.

Thank you for allowing me to address the Committee. I would be happy to answer any questions you or Members of the Committee may have.

Chairman GRAMM. Mr. Hatfield, let me thank you for giving us a good summary of relatively complicated information.

Let me begin with you, Mr. Rohde. You talked about the Administration's three principles, and I would say that I'm in agreement with all three of them. The first is technological neutrality. I assume by that you mean that we're not going to try, in any way, to direct technology in the loan guarantee. We are not going to try to direct who gets the loan guarantee. What we're going to do is set up fiscally responsible parameters and let people apply for the loan guarantee.

The technologies—whether it's the Internet, satellite, cable, or whatever, it may be something that we aren't currently looking at, perhaps something brought forward by the telephone company—whatever it may be, we let them compete for the loan guarantee. Let me be sure that's exactly what you're saying.

Mr. ROHDE. It is. What I'm saying is let's not exclude any technology. Let's make sure that if we structure a loan guarantee program, it's available to a variety of means, whether it be satellite, land-based cable systems, or any other terrestrial wireless systems, such as the LMDS, the MMDS, or others.

I believe we are in agreement. All I'm saying is we should not limit our options.

Chairman GRAMM. Based on what you said, Mr. Hatfield, I assume you agree with that.

Mr. HATFIELD. Yes, I do, Senator.

Chairman GRAMM. Let me get our other witnesses, Mr. McLean and Mr. Roberts, to comment briefly on that.

Mr. MCLEAN. Yes, sir, we would agree. At the Rural Utilities Service, we employ almost every type of technology necessary to get the job done.

Mr. ROBERTS. We would agree as well, Mr. Chairman. We are technology neutral when it comes to this approach.

Chairman GRAMM. Let me turn, then, to your third principle, Mr. Rohde, fiscal responsibility. It seems to me, at least in terms of the contribution of this Committee, that our major focus has to be on trying to be fiscally responsible, trying to write a program that will maximize our chances of achieving what Senator Burns set out to do in his bill, but to try to do it in a way to maximize the probability that the loans will be paid back.

Quite frankly, I don't see that as a conflict with achieving the objective of providing the service. I see a sound loan guarantee program as a mechanism that helps us choose the right technologies because if we guarantee less than the full amount of the loan, which I can assure you we will in our bill, we force the lender to shoulder some of the risk. That gets the lender involved in helping to be sure that we make the right choice.

To the extent that we broaden the assets that have to be committed, one of the things I intend to try to write very strong language on, given the concurrence of the majority of the Committee, is that we want to protect ourselves against what I would call shell entities—might be nonprofit, might be profit—where people set up an organization that has almost no assets to get the loan guarantee, so that if it goes bad, we don't have anything to have recourse on except how they might have misused our money.

One thing I want to try to do is write very strong language that says if a group of companies get together to set up this organization to submit a loan guarantee, they should be committing their assets to it, not just the assets of this shell entity—and I don't mean shell in any kind of derogatory manner.

I would like to get your response on these basic points. I would like to hear your response to the commitment of assets, to guaranteeing less than 100 percent of the loan, those kinds of things as they relate to what you were calling fiscal responsibility.

Mr. ROHDE. Well, Senator, I was trying to think if there was anything you said that I could disagree with, and I can't. I think all the points you raise are very sound and are consistent with existing credit programs and what the Federal Government has required in other loan guarantee programs. I believe you raise a lot of very good points.

The only aspect that I would elaborate on and maybe add to is I think we want to make sure if there is a loan guarantee program, it's going to a market that truly needs it. You do not want to have a loan guarantee program that could be used by an entity to perhaps subsidize service that they are already providing in another

market. You want to make sure that this is targeted to the markets that truly need the help.

Chairman GRAMM. I would also add that almost anything you do has a joint use. Let's say that a local television station wanted to build a bigger tower. It might potentially qualify. But let's say that 60 percent of the benefit of the tower is expanding service and 40 percent is improving the service that's already in the A or B areas. We would then be looking, it seems to me, at guaranteeing a part of 60 percent of the loan, not a part of 100 percent of the loan.

I have heard the people from the satellite industry talk about competing with cable. I am very concerned about this. I have had cable and I now have satellite. I have had both services. But there is something that keeps nagging at me.

My hometown has two cable operators—always has as far back as I can remember—who invested their money to bring signal to our community. I want to be sure that we're not providing taxpayer money to disadvantage them in competition for people they already serve.

I'm for competition. I think it's the basic strength of our system. But, on the other hand, I believe we have to be sure that we're aiming for the right target and we're reaching people who either don't have this service or have very limited access to it. I believe it's going to be very difficult to write a law that actually achieves that result.

Mr. ROHDE. Senator, I would make one comment. If you recall, contained in the legislation in the conference report that was then withdrawn, was a provision that any loan guarantee award not have an anticompetitive effect. I recall a discussion amongst the authors at the time that required the NTIA to have a consultative role and, in fact, a certifying role that it would not have an anticompetitive effect.

I believe that would be helpful. The NTIA can play a role in this if indeed the loan guarantee program is structured and is administered by the RUS. You can have an agency like the NTIA play the role of raising these competitive questions and providing some consultation to make sure that you are not going to be disrupting a competitive market, that it will not have an anticompetitive effect. That seemed to be a decent way to address that issue.

Chairman GRAMM. Let me give everybody a chance to quickly respond, and then I will go to our other Members.

Mr. MCLEAN. Mr. Chairman, in administering a program like the Rural Electrification Act or the Rural Water and Wastewater Program, you have to bring both sound banking principles as well as a commitment to the statute.

In the legislation that Congress had considered, there were some very clear directions with respect to the priorities of Congress as to requirements of insurance, requirements of covering the costs of the loan program, and making certain that loan resources are used for their intended purposes and that they are serving intended beneficiaries. We have to wrestle with these same priorities a great number of times every year. We have a \$4 billion loan program in water, electric, and telecommunications, and that is part of the challenge of running the program. But it's one that is manageable, particularly if Congress writes very clear ideas of priority as to the

mission of the loan program, as well as the financial security that the agency can ensure.

Mr. ROBERTS. Mr. Chairman, I have no comment.

Mr. HATFIELD. I'm an engineering techie, and this is probably a little bit beyond my expertise. Nevertheless, what I heard you say about fiscal responsibility, especially about having a program that has unintended anticompetitive consequences, is certainly, it seems to me, right on target.

Chairman GRAMM. Senator Allard.

Senator ALLARD. Mr. Chairman, I want to repeat my previous question. I heard the perspective of the first panel. I would like to hear the perspective of this panel as well.

You have a loan guarantee program out here and the claim is that you can't make it without the loan guarantees. How is it that you can then make it and pay off the loan, particularly in light of the high-technology environment out there where there is such a short lifespan on how usable that technology remains? What do you use as collateral?

I would like to hear some comments on that issue. Each of you, if you would, can comment.

Mr. MCLEAN. I would be happy to answer that. First, the assets that are collateralized would have to match the life of the loan. That would be a pretty fundamental issue in considering the feasibility of any project.

Second, the most important value of a loan guarantee program is the ability of the program to deliver low-cost capital. In the equity markets, all of us know that equity investors are demanding very high returns and getting very high returns. The same is true in the private lending markets. There are very substantial costs. You have an infrastructure-intensive project. Once again, whether it's for local-into-local, whether it's for water systems, whether it's for electric systems, whether it's for telecommunications systems, the cost of capital is a very significant part of the project cost.

What would be very useful is if an applicant for the loan program were to take advantage of natural efficiencies, perhaps a common platform, so that you wouldn't have to duplicate programming or take advantage of technological efficiencies. That would help to enhance the viability of the loan.

The easy part of the job at the Rural Utilities Service is to be able to make loans, to go to ribbon-cutting ceremonies, and to make speeches, the hard part of the job is to say no to good people who have good ideas, but projects that just don't pencil out. We're not afraid to do that. We have to do that over and over.

Again, depending on what Congress instructs with respect to the purposes of the loan, we would apply sound financial principles to that loan in the evaluation, and hopefully be able to minimize any risk of taxpayer loss.

Senator ALLARD. Do you want to comment further, Mr. Rohde?

Mr. ROHDE. No, I will defer to my friend, Mr. McLean. The specifics of loan finance are outside of my expertise and that of my agency. I concur with what Mr. McLean just said.

Senator ALLARD. Mr. Roberts.

Mr. ROBERTS. I have no comment, Senator.

Senator ALLARD. Mr. Hatfield.

Mr. HATFIELD. I would comment by reinforcing the notion you suggest here that the technology is changing very rapidly with things like streaming video and so forth, where you can essentially deliver television programming over the Internet. This is all changing, as we say, at Internet speeds. It should be something that we are all aware of and concerned about.

Senator ALLARD. I would like to continue along the line of your technology comment. I believe we have been missing in this discussion the Internet aspect of this, where a station could make its programming available over the Internet.

How far away are we from saying that a TV station could make its programming available over the Internet, consequently making that programming available to any household having an existing phone service?

Mr. HATFIELD. I think that question requires a two-part answer. First, of course, is you're seeing it today, but the pictures are small and jerky and so forth.

Senator ALLARD. Yes.

Mr. HATFIELD. Of course, the reason for that is the bandwidth.

Senator ALLARD. Slow.

Mr. HATFIELD. That leads us right back to the issue, again, of the cable companies, the telephone companies, and others trying to overcome that problem as quickly as they can by upgrading the fiber optics. But the difficulty, of course, lies in some of these rural areas. These companies are having trouble getting the speeds up, getting that broadband facility out there so they can deliver the streaming video over that broadband facility. That's the challenge.

Senator ALLARD. We certainly want to keep the Internet as part of the technological choices that would be out there. It could prove to be more feasible in certain areas, and it seems it could work us out of our problem with most carriers. A station, if they want to serve an area, could make their programming available over the Internet, and people could tune in on the Internet to watch.

Mr. HATFIELD. Absolutely. My comment is that you have to have the platform there for the Internet to ride on. Getting the platform, the broadband platform, out where you can stream at high enough speeds to be able to get a good picture is the critical issue.

Mr. MCLEAN. Density and distance are the biggest impediments to having that platform in rural areas.

Senator ALLARD. I understand that.

Mr. MCLEAN. It is a big infrastructure commitment, one which we're very much committed to trying to solve.

Senator ALLARD. Thank you.

Mr. ROBERTS. May I make one comment, Senator?

Senator ALLARD. Yes.

Mr. ROBERTS. The satellite industry and the cable industry have a compulsory copyright license to retransmit broadcast signals. The Internet does not. There is currently not a copyright regime to license Internet retransmissions of broadcast stations.

Senator ALLARD. I'm glad you spoke up. Yes, I want to get that clarified.

Let's assume we have all of the technology in place and that if someone wants to broadcast programming over the Internet, they can. A company, a broadcasting station in Denver, makes the deci-

sion to go on the Internet and they do. They begin to broadcast their programming over the Internet. Their customers pick it up and bring it into their home. Are you saying the copyright laws currently prevent them from doing that?

Mr. ROBERTS. They do not have a compulsory license to do it. In order to do that, they would have to negotiate individually with each of the copyright owners of the programming that they retransmit, which, if they are retransmitting broadcast programming, is going to involve——

Senator ALLARD. That's almost impossible, isn't it?

Mr. ROBERTS. It's extremely difficult. There would be hundreds of copyright owners they would have to execute separate licenses with.

Senator ALLARD. That would necessitate a change in our copyright laws.

Mr. ROBERTS. Yes.

Senator ALLARD. Could we do that and still protect copyrights in a way that would be practical? Is there a practical solution that you see to that?

Mr. ROBERTS. That is a difficult question because the Internet is very different in its potential scope and reach than cable or satellite. It also has virtually no Government regulation at this point in time.

The Copyright Office has always been opposed to compulsory licenses. We always favor a private, free marketplace solution. Currently, we are opposed to extending a compulsory license to the Internet.

Senator ALLARD. Right now, the copyright laws are preventing the Internet from becoming a viable alternative.

Mr. ROBERTS. If there is no free marketplace negotiation, if the copyright owners do not execute licenses——

Senator ALLARD. Which you said would be impossible to do.

Mr. ROBERTS. It is difficult to do. I'm not saying it's impossible. Copyright owners have always said that they are willing to create mechanisms, private mechanisms, to deal with that. But there is currently not a compulsory license to do that.

Senator ALLARD. Could that be fractionated? One of the criticisms I hear from rural areas is that they are unable to get their local news. Let's say that a local station creates all the news. They basically own that. Is there anything to prevent them from saying, well, you can have our news segment, but you may not have our movie segment or anything else which may contain some copyright issues?

Could they just place the news segment of their programming on local television? Could that be worked out?

Mr. ROBERTS. They could certainly do that, yes, Senator.

Senator ALLARD. Thank you, Mr. Chairman.

Chairman GRAMM. Senator Grams.

Senator GRAMS. Thank you very much, Mr. Chairman.

Gentlemen, thank you again for being here. Not that it's ever happened in the past, but I'm very concerned about excessive regulation and paperwork requirements that the Federal Government or the agencies could impose in trying to implement this Satellite Home Viewer Improvement Act.

I would like to know what actions your agencies would take to help reduce any unnecessary regulation upon the licensees which could result in a hidden tax being passed on to the consumer, making it more costly?

Mr. Rohde, what would you do in your role?

Mr. ROHDE. Well, in the legislation that was proposed last year, the administration of the loan guarantee program would be at the Rural Utilities Service. The proposal was that the NTIA would play a role of consulting and actually certifying that there would be no anticompetitive effect. I believe that legislation contained a 90-day deadline for the NTIA's consideration.

Obviously, we're very committed to trying to have as expeditious a process as possible. We would not want to become a roadblock to any consideration. If, indeed, the legislation emerged along the lines of what was being considered last year, I believe the NTIA's role would be more along the lines of just doing a competitive analysis. It may require some information-gathering on the part of the applicant, but we certainly would want to minimize that to the greatest extent possible so we could have an expeditious decision.

Mr. MCLEAN. We would focus, of course, on the purpose of the Act and loan security. Those would be the primary issues for us. We would have to secure sufficient documentation. It would not be significantly different than what you would engage in with a private lender.

We are very proud to report that last year, the Rural Utilities Service received a Hammer Award from the Vice President for our regulatory reductions. We have a goal of reducing our regulations year after year, and I think we're making good progress in doing that. The value of the reduced interest rate provided by the loan guarantees should not be eaten up by increased regulatory burden and red tape.

I believe whatever structure Congress would put into place would be most efficient if it takes advantage of existing program delivery means. That would enable you to jump right into it without having to create a whole new application and review process.

Senator GRAMS. Much of the regulation would come from the implementation and how it was spelled out in the law itself.

Mr. MCLEAN. Yes, sir.

Mr. ROBERTS. I'm pleased to say, Senator, that a loan guarantee program would not affect my agency at all.

[Laughter.]

The Satellite Home Viewer Improvement Act created a royalty-free license, so we are not required to administer any details, to collect any money, or print any forms. That would have no effect on us at all.

Mr. HATFIELD. It is not clear to me what, if any, role the FCC would have on the loan guarantee. Our involvement would probably be where an applicant needs a license, to assist that applicant in getting whatever license they need to be able to go into business. Of course, we're trying to do everything we can to streamline that process and make it as quick as possible.

Senator GRAMS. It is important that we try to provide consumers with these services. We are talking now about how to deliver these services, whether it should be via cable, satellite, or other means,

but what about the broadcasters themselves? Are there any unintended consequences that they could face?

I know that providing these services is going to be a benefit to many. But could there also be some negatives to some of the broadcasters, to a point where it might make their operations unfeasible and put them out of business?

I know first-hand, if we're talking about the dairy industry, how unfair Government laws, regulations, and programs can be. What about the broadcasters? What is in this to protect those who originate the program?

Mr. ROHDE. I would say, as technology emerges, new forms of distribution systems will emerge. In the same way that DBS, which didn't exist 7 years ago, the Internet, and other distribution systems have emerged, there will be new forms of distribution systems following. If the local broadcaster doesn't have access to those distribution systems, I think their future is more imperiled. If I were a small broadcaster operating a small station in a very limited population area, in a rural area, I would be concerned about looking at what's ahead because you want to have access to these various distribution systems.

I believe the peril for small broadcasters lies more with inaction than with regulation. I believe the fact that Congress is looking at this issue, and also that the NTIA is looking at various other types of technologies and how local signals can be carried, is encouraging to local broadcasters.

Senator GRAMS. What if duplicative programs are brought in and are in direct competition with me in my area? Could that be an unintended consequence?

Mr. ROHDE. As you know, that has been the perplexing part of the debate over the Satellite Home Viewer Act. With the authorization of local-into-local over satellite systems, a conflict has been created with the local broadcaster who has been supplying consumers who live in rural areas with a distance broadcast signal.

If other technologies emerge that have similar types of authorization, and if we succeed in carrying local broadcast stations over these technologies, that question becomes minimized in terms of its complexity and in terms of the problems that it causes.

Senator GRAMS. Thank you.

Mr. MCLEAN. Rural broadcasters are going to face a very major challenge upon the conversion from analog to digital, as will rural viewers. It could be that the solution suggested in the Satellite Home Viewer Act and loan guarantees could also provide a solution to that problem. It could provide both an affordable means for consumers to receive their local broadcast signals, as well as a way for rural broadcasters to expand their market penetration and be able to afford the upgrade of their systems. I believe there could be a substantial benefit.

Personally, I just received, thanks to the Satellite Home Viewer Act, the authority to receive local-into-local at my home. I notice that I do, in fact, watch more broadcast stations than satellite-delivered stations, just because of the fact that they are together on the same satellite delivery system. I believe it's fair to assume that if you're delivering more eyeballs to a small-town broadcaster, it's going to be primarily beneficial to that broadcaster to be on the

same platform as other multichannel services, whether it's cable, satellite, or new wireless technologies.

Mr. ROBERTS. From a copyright perspective, the Satellite Home Viewer Improvement Act definitely benefits local broadcasters by permitting local-into-local retransmissions in the satellite context. The network broadcasters are already protected by the copyright laws from satellite carriers importing distant affiliates of the same network and causing the local station to lose viewers, so from a copyright perspective, it's positive.

Mr. HATFIELD. I believe the key to, of course, the broadcasters' success is strong local programming because then, as has already been stated, the additional distribution mechanisms provide additional ways of getting that good strong local programming to additional locations. I agree with the comments made earlier.

Senator GRAMS. Mr. Chairman, I have just one final question for Mr. Hatfield. It deals with section 714 of the 1996 Telecommunications Act which establishes, I believe, Mr. Hatfield, a telecommunications development fund, by which small businesses could apply for loans to deliver telecommunications services to rural, unserved areas.

Mr. HATFIELD. Yes.

Senator GRAMS. What companies could use these funds and for what local services? Are there dollars already available for what we're trying to do here?

Mr. HATFIELD. I may have to get back to you on that question, if you would permit me. I am not completely up to speed on that particular position, but my understanding is that is a very small program. The last I heard, I believe there was only something like \$25 million in that program.

That program was intended, I believe, to do much more innovative things on a smaller project basis, rather than something global or whatever we're talking about here. But it would probably be best if I were to get back to you with a more complete answer.

Senator GRAMS. I am wondering if, in creating a new program, we should get rid of an old one at the same time so we don't keep building.

Thank you very much, gentlemen.

Thank you, Mr. Chairman.

Chairman GRAMM. Perhaps you're dreaming about a world that could be, but perhaps never will be.

[Laughter.]

I want to ask a few concluding questions. Let me begin with you, Mr. McLean.

Obviously, the approach taken by Congress was to create a loan guarantee specifically targeted toward this objective. Our objective will be to try to put that program into place. In that context, we're not simply adding money, a huge amount of money, to an ongoing program, instead, we're setting up a program specifically for this purpose.

It would be my intention to have a board that would make the decisions about the granting of a loan guarantee. As I mentioned to the previous panel, my thinking is that we should have the Secretary of the Treasury designate someone from the Treasury whose primary function is the credit function within the Government, that

we should have the Chairman of the Board of Governors of the Federal Reserve System, Alan Greenspan, appoint a representative. I assume that would be another Member of the Board of Governors. Their role would be to look at the economics of both the proposal and the repayment of the loan.

For example, our most recent loan guarantee was the steel loan guarantee. In working with Senator Domenici, I put the Chairman of the Federal Reserve, the Secretary of the Treasury, and the Securities and Exchange Commission Chairman, all of whom complained that they already had a job, to the task of appointing these individuals. After some pretty extensive work, we ended up with some designees.

Now, I cannot see moving away from that panel. I believe that is critical in terms of ensuring the integrity of the program we're talking about. I don't know who the third member should be, but I think you could make an argument that it should be someone from the Department of Commerce, I think you could make the argument that it should be someone from the Rural Utilities Service, I think you could make an argument that it should be someone from the Federal Communications Commission. I think there are a lot of good arguments that could be made as to who the third member should be.

Then there is the question of who would administer the program once they made the loan decision. I would say, Mr. McLean, at least just beginning to think about it, that your agency would be a potential candidate for that role. I do not want to create a new agency to do it.

My concern is about guaranteeing the integrity of the decision to make the loan. The conditions under which it is made would be set by the legislation. Within that context, do you feel comfortable that if we made the decision to have your agency administer the loan, that once it's made, you would have no problem doing that within the context of the board making the loan decision?

Mr. McLEAN. Assuming that I have the ability to fill vacant positions at the Rural Utilities Service created by recent retirements, we would be able to administer a loan program of the size contemplated by the Burns-Baucher amendment or the Baucus bill.

I should point out, however, that administration of a loan program involves a significant amount of work preceding the decision to make the loan. All of our large loans come to a senior loan committee at the Rural Utilities Service, chaired by myself and staffed by the assistant administrators and our telephone, electric, water programs, and financial services staff.

Much of the work on the loan comes before that decisionmaking process. There is a tremendous amount of expertise required in engineering the loan. There is expertise required in the analysis of the feasibility and the financial underpinning of the application. If Congress were to have a super-senior loan committee to pass judgment on loan recommendation of the Rural Utilities Service, you would need more than those four people to do the actual administration of the loan in preparation of the decision, as well as the administration of the loan both for the servicing of the debt as well as for insuring that the Act purposes are maintained.

We don't want to create a loan guarantee program where, once the loan is made, under the pretense of serving the underserved communities, there is a change in the management decision that says we need to put these resources to New York, Los Angeles, and Chicago. The very purpose of the loan guarantee would be undermined. To avoid that, continuing oversight is required.

Again, on the size of the program envisioned by Senator Burns, Congressman Baucher, and Senator Baucus, I believe we have the staff resources that could handle that.

Chairman GRAMM. If we set up this board and give them the ability to use the expertise of the various departments, including yours, to do the due-diligence on the loans, so that your people, the FCC, and others that have expertise could give them advice, provide evaluation, and assist in making the decision on the loan, within that context, do you think you could make that work?

Mr. MCLEAN. Certainly, we will work with the Congress to make anything work. I hesitate only because without that super-senior loan committee that you describe, we alone are making \$4 billion worth of decisions a year.

Chairman GRAMM. Yes. But what amount of that is in this area?

Mr. MCLEAN. Obviously, the Satellite Home Viewers Act area is a relatively new area.

Chairman GRAMM. I think that's the point. The Congress didn't make this decision to simply expand the Rural Utilities Service. We made this decision to set up a loan guarantee program to try to expedite getting the local signal to the local customer.

It seems to me that if you wanted to do this in the most efficient way possible, you wouldn't create any new Government agencies to provide staff work, assistance, and administration. You would have three people whose job it was to make the decision about the loan. They would draw expertise from the various agencies of the Government that already work in these areas, and you would designate an agency to administer the program once the decision had been made to make the loan. It seems to me that's the way you would go about it.

I was just simply trying to get your views on the workability of that basic approach. If we have the FCC looking at these technical issues, if we have your agency involved in administering loans that are much smaller, but not dissimilar, it seems to me that, basically, we are safe with having the board make the decision by primarily gathering expertise. We would be protecting the taxpayer's interest in making the loan, because \$1.2 billion, \$2.5 billion, is still a lot of money.

Mr. MCLEAN. Yes, sir.

Chairman GRAMM. The problem with having the loan defaulted or having huge amounts of the loan defaulted is we probably, one, will never get the money back and, two, we won't get the signal. The only way that we're ever going to get the signal is to make a successful loan.

Mr. MCLEAN. Yes, sir.

Chairman GRAMM. I'm sure that as this debate flows through the House and the Senate, there will be people who will say, well, it's one thing to be concerned about the loan being repaid, but it's an-

other thing entirely to be concerned about the service actually being provided.

My point is, if the loan is not repaid, that's pretty good evidence that the service was probably not provided. I don't see a conflict. Quite the contrary. I see us maximizing our chances of getting the service by making a good loan to begin with.

In any case, let me conclude by asking if anyone wants to make a final remark before we end the hearing.

Mr. Rohde.

Mr. ROHDE. The only thing I would add is what I said before in my testimony, that I would welcome the opportunity to work with you as you consider this legislation and look at other options.

Chairman GRAMM. Great.

Mr. MCLEAN. We thank the Chairman for the invitation and we will work with you to make any structure work for rural America. We are completely committed to preventing a digital divide in telecommunications and television access for rural Americans.

Mr. ROBERTS. Thank you, Mr. Chairman, for the opportunity to appear.

Chairman GRAMM. Thank you.

Mr. HATFIELD. Again, thank you very much.

Chairman GRAMM. Thank you.

We will hold our second hearing on February 9, 2000.

We stand adjourned. Thank you very much.

[Whereupon, at 12:20 p.m., Tuesday, February 1, 2000, the hearing was adjourned.]

[Prepared statements and response to written questions supplied for the record follow:]

**PREPARED STATEMENT OF SENATOR MICHAEL B. ENZI**

Thank you, Mr. Chairman, for holding this hearing on a very important issue for rural America—television. If you could see the volume of mail my office has received over the past 3 years, you would know how important it is for my constituents to watch their favorite sports teams and television shows. More importantly, you would know how important it is for them to get their local weather warnings that could potentially affect their livelihood—perhaps even their lives.

I would also like to take this opportunity to welcome David Moskowitz, Senior Vice President of Legal and General Counsel, Secretary, and Director of EchoStar Communications, to today's hearing. EchoStar Communications currently employs several hundred Wyoming residents at its state-of-the-art uplink facility in Cheyenne and at its headquarters in Littleton, Colorado. We are very proud to have this important facility in Wyoming.

Wyoming only has television stations in three of its cities—Casper, Cheyenne, and Jackson. The rest of the State is served by either stations from out-of-State or by relay transmitters that bring the stations to outlying towns. Wyoming has long distances and tall mountains that make even the best efforts by over-the-air broadcasters and cable companies more difficult. For the households that are located in the remote areas of the State—beyond the reach of cable and relays—satellite is the only reliable and cost effective choice. But until now, satellite has had one distinct drawback, there was no way to get the news or other local programming that a Wyoming television station would carry because of the small population of my State. It is doubtful, without some kind of incentive program, that local television stations will be available to rural households.

Last November, Congress passed the Satellite Home Viewer Improvement Act to bring the law governing the direct broadcast satellite (DBS) industry up to date to reflect the current state of the industry. As part of that bill, the Congress authorized for the first time satellite companies to retransmit local stations back into their local markets. However, due to satellite capacity, the two national DBS companies, DIRECTV and EchoStar, will only be able to serve the top 50 out of 210 television markets, or 75 percent of the households in the Nation. That leaves 160 markets or 25 percent of the Nation without satellite-delivered local television stations. The two media markets in Wyoming are ranked 197 and 199, meaning that without some sort of incentive, local television will probably not be available in Wyoming.

The purpose of this series of hearings is to examine ways to encourage the private sector to provide local television stations via satellite in rural areas. At the end of the last session, loan guarantees for not-for-profit corporations to provide this service was proposed as the solution. Under that language, the Government would guarantee loans up to a total of \$1.25 billion for not-for-profit corporations to build and launch satellites to provide local television stations in rural markets. Since that time, there have been calls that Congress not favor one industry or technology over another to ensure that all potential providers are allowed to participate in the program. I am optimistic that the Banking Committee will develop legislation that will make local television stations available to all rural Americans.

Thank you, Mr. Chairman. I look forward to working with you and the Members of this Committee to solve this pressing problem in rural America.

**PREPARED STATEMENT OF SENATOR TIM JOHNSON**

Thank you, Mr. Chairman. I want to thank our distinguished witnesses for taking the time to visit with us on this issue so critical to rural America. With the knowledge and experience of these folks, I am confident we can resolve this issue expeditiously. Their input will be essential as we continue that process.

I think the immediacy of this issue is apparent by the fact that we are having this hearing so early in the session. I was a cosponsor of the Satellite Home Viewer Improvement Act, and I strongly supported the final package produced by the Conference Committee, including the rural local broadcast provision. This provision will bring hope to over 50 million homes in 150 TV markets who otherwise would not receive local signals via satellite.

The legislation we passed last year permitted satellite providers to provide local-to-local coverage. Satellite viewers could receive their local networks over the dish, much like cable systems provide the local networks via cable. Unfortunately, this legislation does not require that all markets be served with local-to-local. Thus, while the 50–60 largest markets will be served, the rest of the Nation will not have access to any network programming via satellite.

Like many of my colleagues, I represent a State, South Dakota, with rural viewers that should not be left out of the information age. While everyone in this room will be able to access network programming by satellite, no one living in Sioux Falls or Rapid City will.

Senators Burns and Baucus have crafted an innovative, fiscally responsible plan that will ensure that all consumers, especially those in medium and small markets, have access to local broadcast signals via satellite. Without this plan, only the very largest television markets in America will receive local-into-local service authorized by this legislation. These are the profitable cities like New York and Los Angeles. Under current estimates, as few as 30 of the 210 TV markets will have local service via satellite without the rural provision. South Dakota is one of the 16 States that do not have a single city among the top 70 markets. Without this loan guarantee, markets like Sioux Falls and Rapid City will never get local-into-local service.

This proposal is more than just getting sports or entertainment programming over your local channels. It is a critical way to receive important local news, storm information, road reports, and school closing information. Rural Americans need the same opportunity to access their local networks via satellite. Without the rural provision to the enacted legislation, they will lose that opportunity. This approach will spur technologies that will bring news and information via satellite to consumers who because of distance or geography are not able to get local TV signals.

Here are a few things to keep in mind about the Baucus bill of which I am a cosponsor. Only those entities that bring forth a credible, financially secure plan will be eligible for the loan guarantees. The Agriculture Department will conduct a rigorous screening process and consult with several agencies, including the Treasury Department, the National Telecommunications and Information Agency, and the Federal Communications Commission, before entering into any loan guarantee.

This plan is not a giveaway to the large satellite companies as some have stated on the Senate floor. In fact, these companies are not eligible for this program. I would not endorse any program that would jeopardize the Treasury or the American taxpayer. The program is capped at \$1.25 billion and has been crafted to ensure there is no exposure to the taxpayer. This proposal has overwhelming bipartisan support. It passed the House last year by a vote of 411-8.

Again, I thank the witnesses for joining us today, and I look forward to their continued input as we pursue this equal opportunity for rural America.

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#### **PREPARED STATEMENT OF SENATOR RICHARD H. BRYAN**

Thank you, Mr. Chairman, for holding this hearing today on an issue of great importance to many American consumers.

Mr. Chairman, the issue of satellite broadcasting, and "local-into-local" service, was an issue that we struggled with for many months last year in the Commerce Committee. I was a strong supporter of the Satellite Home Viewer Improvement Act. That legislation, enacted last year, has opened the door for at least one direct broadcasting system to offer "local-into-local" service for thousands of satellite users in the Las Vegas area alone. Those of us who supported this bipartisan legislation all shared a common goal—to allow television consumers to purchase the television and cable services which best served their needs.

We have nearly 80,000 households throughout the State of Nevada that depend on satellite technology. As I am sure many of my colleagues on this Committee know, consumers living in large rural States, perhaps hundreds of miles from the nearest metropolitan area, face unique challenges in their everyday lives—including their television viewing options—that consumers living in small to large cities often take for granted.

The loan guarantees that were included in the original satellite legislation were designed to encourage system operators to provide local-into-local service to rural consumers that do not have access to local signals, and certainly that is a goal we must continue to pursue. However, questions have arisen as to whether the technology and satellite capacity exists to fulfill the promises made by those who might apply for the loan guarantees.

Clearly, more and more American consumers are choosing satellite technology for their home television needs, and given the vast numbers of consumers who will very likely be shut out of local-into-local service if we do not act, I am hopeful we can come up with a sound proposal that will indeed encourage providers to develop this critical service for rural and small-town America.

These are very important issues that should be addressed in these hearings in the coming days, and I look forward to hearing the testimony from the distinguished witnesses before us.

Thank you, Mr. Chairman.

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**PREPARED STATEMENT OF SENATOR JIM BUNNING**

I would like to thank all of the witnesses for testifying today, and I would like to thank you, Mr. Chairman, for holding this hearing.

Obviously, satellite television has become more and more popular throughout our country. It is very important in States with large rural populations like Kentucky. In many parts of Kentucky, it is virtually impossible to receive a broadcast television signal. Cable companies do not serve many of these rural areas. Many in my State are forced to rely on satellite television to receive the news of the day, weather reports, entertainment, and most importantly, University of Kentucky basketball.

It is very important that we hold this hearing to help decide what is the best way to ensure that folks in rural areas of Kentucky have the same access to media that people in Lexington or Louisville have.

I am definitely interested in learning about the new technologies. I am also very interested in learning the industries' thoughts about the Federal loan guarantees that caused so much controversy at the end of the first session of this Congress.

Obviously, we have a big job ahead of us in finding a solution to this problem that everyone can live with before March 30, 2000. I believe the testimony of all of our witnesses will help us find an answer.

Again, I thank all of the witnesses for coming before us today and I look forward to hearing their testimony.

Thank you, Mr. Chairman.

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**PREPARED STATEMENT OF SENATOR WAYNE ALLARD**

I would like to thank the Chairman for holding this hearing today. As we are all aware, the Banking Committee has the opportunity to review loan guarantees for satellite television as the result of a compromise between various Members.

I realize there are strong feelings on both sides of this issue, and I would like to thank my colleagues for allowing this provision to come before the Banking Committee. I believe that the committee process plays a valuable role in the Senate. As a Member of the Banking Committee, I look forward to the opportunity to review the loan guarantee provision and to take part in that process.

The issue of a Government loan guarantee program of \$1.25 billion is a very serious issue that merits careful attention. I look forward to the first in our series of hearings to examine this proposal more carefully.

Finally, I would like to welcome one of my constituents, David Moskowitz with EchoStar Communications, to today's hearing. Mr. Moskowitz, I appreciate you coming from Colorado to testify before the Banking Committee.

We have a great lineup of witnesses, and I look forward to hearing from them.

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**PREPARED STATEMENT OF SENATOR CHUCK HAGEL**

Good morning, Mr. Chairman. I would like to thank you for holding this very important series of hearings.

Last year, we passed the Satellite Home Viewer Improvement Act (SHVIA), which was included in the FY2000 Consolidated Appropriations Act. The SHVIA expanded on and extended provisions of the 1988 Satellite Home Viewer Act (SHVA).

One of the biggest changes incorporated by the SHVIA was allowing satellite companies to retransmit local television network signals back into the same local market area, known as local-into-local broadcasting. Unfortunately, the SHVIA does not ensure that all satellite television consumers will be able to receive their local television signals. The national satellite companies have announced that they will only offer local-into-local programming in the top 25 to 40 television markets.

In my State of Nebraska, the largest television market is Omaha, which is ranked number 73. In fact, out of the 210 television markets, Nebraska has one of the smallest—North Platte is 209. Under the current law, the 248,726 satellite television viewers in Nebraska are unlikely to see any benefits from the new local-into-local broadcasting provisions.

There was an attempt last year to include a provision in the SHVIA that would have established a \$1.25 billion loan guarantee to help ensure that satellite television subscribers in rural areas would benefit from the local-into-local programming. Under the proposed provision, companies could qualify for loan guarantees if they provided local television signals to the smaller television markets not expected to receive local signals from satellite providers. However, because of concerns regarding the lack of full consideration by Congress and the effectiveness of the program, it was not included in the final package.

I am hopeful that Congress will be able to find a solution to help all television viewers gain access to local programming, including those in North Platte. It may be that a loan guarantee program is the best way to get at this problem. There may be other ways to solve this problem, but we should at least have a better idea on how to proceed after this series of hearings.

I realize that this process is not going to be easy. There are many questions that need to be answered, but I am confident that we can find the answers.

I look forward to hearing from our witnesses, not only today, but also throughout this series of hearings.

Thank you, Mr. Chairman.

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#### PREPARED STATEMENT OF SENATOR JOHN EDWARDS

I would like to thank Chairman Gramm and Ranking Member Sarbanes for holding these hearings. I believe we are here today to discuss an issue of great importance to many Americans—access to local television programming. I look forward to hearing from the various witnesses.

For many months now, I have been hearing from concerned North Carolinians who want to know why they are not able to see their local affiliates via their home satellites. Many of these constituents believed that when we passed the Satellite Home Viewer Improvement Act they would be able to watch their local channels. And they will, but it looks like it won't happen any time soon.

This problem is pretty serious in North Carolina. Moreover, while roughly 3 percent of homes in the United States do not have access to cable, in North Carolina, that figure is much higher, at 9.5 percent. Most people believe that both of those statistics should be significantly higher. Some of these households may have satellite dishes, so maybe they receive movies and other channels, but these people are *not* receiving local programming. Similarly, many North Carolinians who own satellite dishes and who live within Grade B contours are not receiving local programming. Even though many of these people theoretically can get local programming now that the Satellite Home Viewer Improvement Act is law, the reality is that a great number of these people will not see local programming for a very long time, if ever.

I am committed to making sure that rural residents have access to local programming, sooner rather than later. I strongly believe the loan guarantee program that we will hear about today is a critical step we need to take.

Let me tell you why I think this is so important. It's very simple. People need to know what is going on around them. In North Carolina, we have recently experienced some of the most catastrophic natural disasters in the recorded history of the State, and people need to be able to get local information about weather and emergencies. People need to know what their local legislators are doing for them. Rural schools need to have access to educational programs that help keep their students on par with students in urban areas. Put simply, people need to know what is going on in their community.

We are going to hear today from the satellite and the cable industries about how they think we could and should structure a loan guarantee program to reach the unserved and underserved households in America. I think we need to listen very carefully to what each side has to say, because we want to make sure that we proceed carefully. I want to make sure that my constituents have access to their local programs and affiliates, and I want to make sure that we do it in a way that does not expose taxpaying Americans to costly risks.

I look forward to hearing from the various witnesses today. In particular, I hope to hear about the time frame for providing local programming to markets such as Charlotte, North Carolina (which is the Nation's 28th largest market), and to other smaller markets. I also hope to hear what is being done to address the lack of access in the more rural areas. With almost 33 percent of households in North Carolina located in rural areas, I'm extremely concerned that these people may be faced with a significant wait before they are able to receive local programming.

I thank the witnesses for being here and look forward to hearing their comments.

**PREPARED STATEMENT OF K. JAMES YAGER**

PRESIDENT AND CHIEF OPERATING OFFICER  
BENEDEK BROADCASTING, ROCKFORD, ILLINOIS, AND  
JOINT BOARD CHAIRMAN, NATIONAL ASSOCIATION OF BROADCASTERS

ON BEHALF OF THE

NATIONAL ASSOCIATION OF BROADCASTERS

FEBRUARY 1, 2000

**Introduction**

Thank you, Mr. Chairman, for the opportunity to appear before the Senate Banking Committee today. I am K. James Yager, President and Chief Operating Officer of Benedek Broadcasting, which owns 26 television stations in small markets across the Nation. I also serve as Joint Board Chairman of the National Association of Broadcasters (NAB), on whose behalf I appear today. The NAB represents the many owners and operators of America's radio and television stations. My remarks today will address the loan guarantee program as proposed by the House and Senate conferees last year.

The satellite TV industry began as a service primarily targeting rural Americans who could not receive broadcast television signals over the air. The passage of the Satellite Home Viewer Act in 1988, which permitted delivery of network stations to unserved households, led to vigorous growth of the satellite industry. The recent enactment of the Satellite Home Viewer Improvement Act (SHVIA) has further enhanced the competitiveness of the satellite industry vis-à-vis the cable industry by providing satellite carriers a statutory copyright license to deliver local television broadcast signals within a station's market.

The NAB applauds the Committee's interest in ensuring that all Americans, particularly those in rural and small markets, benefit from the recently passed Satellite Home Viewer Improvement Act. The House and Senate conferees recognized that the current plans of satellite carriers did not include delivery of local signals in most smaller television markets. By example, more than one-half of all stations may not be available on satellite to local viewers. To address this concern, they drafted the loan guarantee program in an attempt to ensure that rural Americans could receive local television signals by way of satellite. Beginning in 2002, all carriers will be obligated to carry all stations in any market where they elect to serve with local signals. Given the rapidly growing popularity of direct broadcast satellite (DBS), the NAB believes that the vitality of the local free over-the-air broadcast system that Congress has consistently worked to preserve may well be threatened if half of the Nation's television stations (a vital source of local information) are shut out from satellite carriage.

**The State of the Satellite Marketplace**

Current trends indicate that satellite companies will in fact provide local broadcast television signals via satellite only in the largest markets and not in rural areas. Despite huge capacity (up to 500 channels, many of which are devoted to pay-per-view and other premium services) and strong demand for local stations, satellite operators have stated that providing local signals to rural markets is not feasible at this time. The NAB understands that both DIRECTV and EchoStar currently provide local signals to approximately 42 percent of the Nation's television households in 19 and 20 markets, respectively. EchoStar plans to provide local signals to 60 percent of U.S. television households by the end of March 2000 (approximately the top 37 markets). DIRECTV plans to add 4 more markets in the next few weeks. A market-by-market listing as of January 27, 2000 is set forth in Table A (located at the end of this statement).

For a time, it appeared that Local TV on Satellite, founded by Capitol Broadcasting and other investors, would provide local-into-local in all markets. That company, however, appears to have revised its business plan and now may only provide local stations in the top 68 markets.

In short, the business plans of satellite providers will leave many rural Americans without access to satellite delivery of the signals of their local stations, the signals which provide viewers with the local news, weather, sports, and other informational programming.

The NAB, therefore, strongly endorses the policy objective of the proposed loan guarantee program, which is to ensure that delivery of all local stations irrespective of market size by satellite is economically feasible. Without satellite delivery of rural television signals, access to 800 of the Nation's television stations that serve America's smaller communities is at risk if viewers cannot watch local programming by way of satellite. We are concerned, however, that given the economic and technical

hurdles of delivering local signals by satellite, the proposed program may be too limited in scope and too administratively cumbersome to provide the necessary jump start.

#### **Economic and Technical Hurdles to Rural Delivery of Local Signals**

The satellite industry historically has faced legal, technical, and financial obstacles preventing the delivery of local signals. The passage of the SHVIA eliminated a legal obstacle by creating a statutory compulsory copyright, but the technical and financial hurdles remain.

##### *A Limited Rural Consumer Marketplace*

Even though one-half of America's television stations are located in the smallest 154 television markets, only 25 percent of the U.S. population resides in those markets. Seventy-five percent of the U.S. population (and the other half of the Nation's television stations) is located in the largest 60 television markets. Current local-into-local retail packages marketed by EchoStar and DIRECTV are \$4.99 and \$5.99 for four or five local stations. In order to compete with cable, any satellite local-into-local package must remain within this range. At those levels, we very much doubt that a rural provider could ever hope to break even.

##### *The Need for a Spot-Beam Satellite Design and an Orbital Slot*

Delivering 800 local stations via a conventional satellite from a single orbital slot is not technically feasible for the following reasons:

1. *Capacity.* Typically, a range of only 250 to 300 channels can be delivered due to frequency and power limitations.
2. *Geographic Coverage.* Current DBS's located within the 101° to 119° orbital arc are able to deliver the same channels to customers located anywhere in the continental United States. Although this nationwide coverage is practical for channels such as CNN, ESPN, and HBO, it is an expensive and wasteful approach for delivering local television stations that can legally be viewed only in the station's local market.

Relatively new commercial technology—a spot-beam satellite—is the answer, but spot-beam satellites represent expensive design challenges. In addition, a company developing a rural plan must lease or acquire an orbital slot at a potentially very high cost.

##### *The Need To Be a Wholesaler, Not a Retailer*

The NAB does not believe that it is practicable to develop a rural local plan without partnering with DIRECTV or EchoStar. The two primary reasons are the need to create a consumer-friendly, sellable product and the need to limit marketing and backroom costs.

##### *The Technical Challenges of Partnering With DIRECTV or EchoStar*

A potential relationship between a third party local-into-local service wholesaler and DIRECTV or EchoStar requires the resolution of many technical issues. Those issues relate to the location of the local-into-local orbital slot and the development of an affordable consumer receiver and dish. Challenges include:

- Finding an orbital slot close enough to the current DBS slots to allow a one-dish solution;
- Developing set top boxes that can receive signals from the Ku-band, where the DBS providers are located, and the Ka-band (used by small dishes), the likely location of a third party local-into-local provider;
- Developing technology that will interface with differing transmission and conditional access systems used by DIRECTV and EchoStar.

##### *Locating, Building, and Maintaining Numerous Uplink Sites*

If a spot-beam satellite is used, local television stations must be uplinked from a facility located within the footprint of that individual spot beam. The number of spot beams determines the number of uplinks. Additional uplinks may be required to comply with legislative restrictions and to reduce the cost of delivery of the local signals to the uplink site.

##### *The Overall Expense—\$600 Million to \$1 Billion*

The NAB estimates that in order to develop and execute a feasible technical plan to provide all local stations to rural America it will cost from \$600 million to \$1 billion, depending on (1) whether the plan includes a spare satellite and (2) the number of markets planned to be covered. The cost of building, launching, and insuring a spot-beam satellite is hundreds of millions of dollars, even without the redundancy

of a spare satellite that prudence might require. An orbital slot must be acquired or leased. Numerous local uplink facilities must be located, built, and maintained costing several million dollars each. Other major costs include a master control center and conditional access to ensure that consumers are only receiving stations in the market in which they live.

#### **Is the Loan Guarantee Program an Appropriate Economic Incentive?**

Given these challenges, the NAB believes that an economic incentive of some kind is appropriate, but is unsure whether the loan program as proposed will meet its important objective. Understandably, the proposal contains numerous mechanisms to protect the Government against the risk of default. While the Government needs some security, the loan guarantee program should not dictate a borrower's business plan. Likewise, given the lead time necessary to undertake a satellite project (even if work were begun immediately, a satellite project of this scale has a lead time of at least 2 years), a borrower's qualification for the loan guarantee should not be unduly delayed by multiple layers of bureaucracy.

#### *Cap on Loan Amounts*

The conferees' bill contains caps on the amount of the loan guarantees that are too low to ensure success of the program. The Government would guarantee one loan not to exceed \$625 million, and any other loan could not exceed \$100 million. These caps pose a potentially serious problem for borrowers and would benefit one borrower to the exclusion of others.

#### *Cumbersome Approval Process*

The proposal also contains several layers of approval, any one of which is susceptible to delays that could threaten the success of the program. Prospective borrowers may be unwilling to front the substantial development costs of planning and structuring a \$600 million to \$1 billion satellite project without assurance of approval of the various entities involved: Congress, the Secretary of Agriculture, the OMB, and the NTIA.

Specifically, the conferees' bill would require Congress to authorize funds before the Secretary could approve any loan guarantees. In addition, the bill imposes a broad panoply of consultation requirements on the Secretary of Agriculture, who will administer the program. The Secretary must consult with the OMB and an outside accounting firm within 180 days of enactment, and then must obtain NTIA certification for each loan application. The NTIA may take up to 90 days, a time period that does not even commence until after the Secretary submits the application for review. In sum, the variegated layers of approval could unduly draw out the borrowing process, yet time is of the essence given the commencement of must-carry requirements under the SHVIA in 2002.

#### *Priority Lien*

The conferees' bill would require the Secretary to take a priority lien on the borrower's assets. This lien would trump the liens of any other creditors. Under predecessor loan programs, such as the Rural Electrification Act, the law very specifically allowed the Government to take a subordinated interest. Subordination allows borrowers to secure senior loans, in addition to their federally guaranteed loans, and reduces equity requirements. In view of the high risks and very speculative returns of a rural satellite project, subordination may be necessary to the success of the project. Alternatively, if the Government is not permitted to take a subordinated lien, the cap on loan guarantees should be raised to reduce the risk to lenders.

#### *Disqualification of Existing DBS Operators*

While satellite carriers are critical to the delivery of local signals, the language in the bill appears to exclude the two existing DBS operators. The success of this program may well depend on the satellite carriers' cooperation since subscribers are likely to prefer hardware that is inexpensive and interoperable with their existing DBS equipment. Yet, under this proposal, the satellite carriers with suitable unused spectrum may not participate in the loan program, and the NAB understands that DIRECTV and EchoStar, both likely partners in this process, may have available spectrum. The broad language of the bill would appear to disqualify consortia even when EchoStar, DIRECTV, or their affiliates hold only a minority interest. Accordingly, this limit on eligibility may be counterproductive in achieving the ultimate goal of delivering local signals to unserved areas.

#### **The Need for Study and Careful Consideration**

Given the technical and economic hurdles that satellite carriers would have to overcome in order to provide local television signals to rural Americans, and given

the complexity of designing an efficient and effective loan guarantee program, the NAB thanks the Senate Banking Committee for conducting this hearing, which we assume is the beginning of a thorough inquiry into alternative incentives. We also applaud the NTIA for commencing a wide-ranging public inquiry into local-into-local technology. The NTIA has requested public comment on how to ensure the provision of local programming by satellite and other technologies to viewers in smaller communities. Congress, likewise, should take a careful and thorough look at alternative approaches, such as tax credits or direct loan programs.

**Conclusion**

Mr. Chairman, the NAB applauds Congress' recent action in passing the Satellite Home Viewer Improvement Act and the efforts of Congress to sustain localism by ensuring that rural Americans will benefit from access to local signals by satellite. The future of the 800 television stations operating in smaller markets and access to their signals for millions of Americans will depend on the success of this effort. And it must be a joint effort. It cannot happen without the cooperation of the broadcast, satellite, and banking industries.

The NAB is concerned, however, for the reasons I have discussed, that the loan guarantee program in its present form will not achieve this important objective. We look forward to working with this Committee to design an appropriate economic incentive. Once again, I would like to express on behalf of the NAB its appreciation for the opportunity to testify before the Members of the Senate Banking Committee today.

**TABLE A DMA's Served by DIRECTV and EchoStar***January 27, 2000<sup>1</sup>*

| <b>Rank</b> | <b>Market</b>                             | <b>TV Households</b> | <b>% of U.S.</b> | <b>DIRECTV</b> | <b>EchoStar</b> |
|-------------|---|----------------------|------------------|----------------|-----------------|
| 1           | New York                                  | 6,812,540            | 6.854            | Yes            | yes             |
| 2           | Los Angeles                               | 5,135,140            | 5.167            | Yes            | yes             |
| 3           | Chicago                                   | 3,164,50             | 3.184            | Yes            | yes             |
| 4           | Philadelphia                              | 2,667,520            | 2.684            | Yes            | yes             |
| 5           | San Francisco–Oakland–San Jose            | 2,368,970            | 2.383            | Yes            | yes             |
| 6           | Boston                                    | 2,186,100            | 2.199            | Yes            | yes             |
| 7           | Dallas–Ft. Worth                          | 1,959,680            | 1.972            | Yes            | yes             |
| 8           | Washington, DC–Hagerstown                 | 1,956,160            | 1.968            | Yes            | yes             |
| 9           | Detroit                                   | 1,846,950            | 1.858            | Yes            | yes             |
| 10          | Atlanta                                   | 1,722,130            | 1.733            | Yes            | yes             |
| 11          | Houston                                   | 1,665,550            | 1.676            | Yes            | yes             |
| 12          | Seattle–Tacoma                            | 1,548,200            | 1.558            |                | yes             |
| 13          | Cleveland                                 | 1,475,820            | 1.485            | Yes            |                 |
| 14          | Tampa–St. Petersburg                      | 1,463,090            | 1.472            | Yes            |                 |
| 15          | Minneapolis–St. Paul                      | 1,457,820            | 1.466            | Yes            | yes             |
| 16          | Miami–Ft. Lauderdale                      | 1,418,940            | 1.428            | Yes            | yes             |
| 17          | Phoenix                                   | 1,343,040            | 1.351            | Yes            | yes             |
| 18          | Denver                                    | 1,230,440            | 1.238            | Yes            | yes             |
| 19          | Pittsburgh                                | 1,136,230            | 1.143            |                | yes             |
| 29          | Raleigh–Durham                            | 834,260              | 0.839            | Yes            |                 |
| 30          | Nashville                                 | 811,870              | 0.817            |                | yes             |
| 33          | Kansas City                               | 802,290              | .807             |                | yes             |
| 35          | Greenville–Spartanburg–Asheville–Anderson | 739,850              | 0.744            | Yes            |                 |
| 36          | Salt Lake City                            | 707,070              | 0.711            |                | yes             |
|             | <b>Total % of U.S. Served</b>             |                      |                  | <b>41.701%</b> | <b>42.197%</b>  |

<sup>1</sup> Source: Nielsen Media Research 1999 Estimates; DIRECTV and EchoStar Company Press Releases.

**PREPARED STATEMENT OF RICHARD SJOBERG**

PRESIDENT AND CHIEF EXECUTIVE OFFICER  
SJOBERG'S INCORPORATED, THIEF RIVER FALLS, MINNESOTA

FEBRUARY 1, 2000

Mr. Chairman, Members of the Committee, my name is Dick Sjöberg. I am President and Chief Executive Officer of Sjöberg's Incorporated, a privately held cable company located in northwestern Minnesota. I serve as Chairman of the National Cable Television Association's Rural and Small System Operators Committee and am also a member of the NCTA's Board of Directors.<sup>1</sup>

My family entered the cable television business in 1962. In those early days of the industry, our main goal was to bring broadcast signals to the communities that could not receive them over-the-air—especially in rural areas. My company built its own facilities, beginning with a cable system in Thief River Falls, Minnesota—a small town of 8,010 which was approximately 92 miles from the nearest broadcast station at the time the system was built. Some of our systems today are as many as 133 to 200 miles away from the nearest broadcast station they carry.

Today, Sjöberg's Incorporated serves approximately 7,400 customers in 33 small rural towns and townships, with densities ranging from 12 to 22 homes per mile of cable plant (see attached chart). Since 1993, we have installed fiber to connect each of these towns. In 1998, we began offering our customers digital cable service, recognizing that we needed to provide more channels to compete with DBS. At present, we offer our subscribers 148 channels of cable and broadcast programming.

As a company, we are committed to delivering new broadband services not only to our residential customers, but also to the schools in the rural communities where they live. For example, as part of our company's commitment to the cable industry's **High Speed Education Initiative** and **Cable in the Classroom**, we have wired all 18 schools in our service area with cable TV and are currently providing a free cable modem and high-speed Internet access to five schools. All 18 schools will have free, high-speed access to the Internet by the end of the year. We have also interconnected all of the schools in one of our districts with fiberoptic cable. Furthermore, half of our residential customers currently have access to high-speed cable modems, while the rest will have access to broadband services by the end of 2000. We have invested substantial amounts of private risk capital to bring these services to our customers and do not rely on public funding.

To date, my company is the only video service provider to make this kind of investment in these rural Minnesota communities. I am a resident of the area, participate in community activities, and pay approximately \$30,000 per year in franchise fees to local franchising authorities. My goal as a local businessman is to ensure that my customers have access to the same services as their counterparts in much more populated areas. Moreover, I am not alone. As the FCC Cable Bureau's report, *Broadband Today* (October 1999), indicates, small and rural cable systems across the country are deploying broadband facilities and services.

My cable company and others continue to deploy digital video and broadband services in rural America, even though the required upgrades are very expensive and capital intensive. We are willing to undertake the risk of deploying advanced networks in low-density, high-cost areas because of the stable regulatory environment provided by the Telecommunications Act of 1996 and because we believe that these services appeal to the rural communities we serve.

The NCTA and many small cable systems supported the Satellite Home Viewer Improvement Act of 1999—procompetitive legislation which changed the law to permit satellite companies to retransmit local broadcast signals into local markets, including rural markets. We also understand this Committee's policy goal of providing improved access to broadcast signals and are prepared to compete with other video providers. **We are concerned, however, about proposals that might provide Government subsidies to some industries—but not others—in an otherwise competitive video marketplace.**

Small cable operators like myself compete against DBS in every market we serve, including rural markets. Our DBS competitors already have certain advantages because they can reach every home without the high marginal costs that limit a small cable operator's ability to provide service to less densely populated areas. They also have the technical capability to provide more channels than a typical small cable system. **Some of the proposals for expanding local-into-local service compound our competitors' advantages by having the Federal Government sub-**

<sup>1</sup>NCTA represents cable companies serving more than 90 percent of the Nation's 68.5 million cable customers and more than 100 cable program networks.

**sidize DBS's capacity to provide local broadcast signals—even though these competitors are owned by companies with market capitalizations of \$21 billion (EchoStar) and \$16 billion (GM/Hughes) and have annual revenues of \$1 billion to \$6 billion.**

As a small cable operator, I already carry all local broadcast signals on my systems. In fact, I am required to do so by the must-carry provisions of the 1992 Cable Act. I raised the money to carry these signals and others in private capital markets. The fear of many small cable operators is that any rural loan guarantee program will be interpreted as a congressional mandate to build another satellite—at discounted, federally insured rates—to carry local broadcast signals into those markets which local businesses could serve more cost-effectively through other technologies.

For example, my company has cost-sharing agreements with Roseau County and Lake of the Woods County to transport over-the-air broadcast signals into areas they would otherwise not reach. (I use a combination of fiberoptic cable, microwave signals, and translators to provide this service, even though the signals compete with those on my own cable system.) Note that in these areas, the local rural cooperative acts as the selling agent for DIRECTV. The rural co-op provides its customers with dual antennas to receive both the satellite signals and local broadcast signals in direct competition with my cable service.

If Congress decides to move forward with a Federal loan guarantee program, I would ask that it adopt one that is:

- ***Technology neutral***, giving small “Main Street” businesses the opportunity to extend the reach of local broadcast signals in a more cost-effective way. Small cable businesses and others could use loan guarantees to extend their facilities to areas that are not currently economical to serve—typically areas with fewer than 10–12 homes per mile. They could also utilize other technologies, such as translators, microwave links, repeaters, relay stations, and new wireless systems, to improve access to broadcast signals. **The need for such technology neutrality is especially important since companies like mine are providing rural consumers with broadband services and high-speed access to the Internet, thus helping to bridge the digital divide.**
- ***Narrowly focused on the unserved or the most underserved markets.*** Any Government funding or loan guarantee program should focus on areas with the least local broadcast signal coverage and should not be used to subsidize DBS service in urban and suburban markets.
- ***Set up in a manner that minimizes the paperwork burden on applicants.*** The program should be set up in a manner that creates the smallest paperwork burden possible, thus encouraging smaller businesses to apply and provide cost-effective, local solutions.

Thank you for your attention. I stand ready to work with this Committee as it moves forward on legislation to provide better television service in rural and underserved areas.

**List of Towns and Townships  
Served by Sjoberg's Incorporated**

| <b>Community</b>            | <b>Population</b> |
|-----------------------------|-------------------|
| Thief River Falls, MN       | 8,010             |
| North Township, MN          | 150               |
| Rocksbury Township, MN      | 486               |
| Roseau, MN                  | 2,396             |
| Jadis Township, MN          | 162               |
| Spruce Township, MN         | 228               |
| Middle River, MN            | 369               |
| Spruce Valley Township, MN  | 9                 |
| Greenbush, MN               | 820               |
| Hereim Township, MN         | 31                |
| Warren, MN                  | 1,813             |
| Warrenton Township, MN      | 20                |
| McCrea Township, MN         | 36                |
| Red Lake Falls, MN          | 1,481             |
| Red Lake Falls Township, MN | 42                |
| Warroad, MN                 | 1,679             |
| Lake Township, MN           | 1,630             |
| Enstrom Township, MN        | 61                |
| Cedarbend Township, MN      | 16                |
| Moranville Township, MN     | 66                |
| Holt, MN                    | 61                |
| Viking, MN                  | 88                |
| Karlstad, MN                | 921               |
| Deerwood Township, MN       | 59                |
| Newfolden, MN               | 382               |
| Badger, MN                  | 498               |
| Stokes Township, MN         | 20                |
| Baudette, MN                | 1,146             |
| Wabanica Township, MN       | 160               |
| Wheeler Township, MN        | 211               |
| Gulrid Township, MN         | 72                |
| Spooner Township, MN        | 101               |
| Baudette Township, MN       | 109               |
| <b>Total</b>                | <b>23,333</b>     |

**PREPARED STATEMENT OF B.R. PHILLIPS III**

PRESIDENT AND CHIEF EXECUTIVE OFFICER  
NATIONAL RURAL TELECOMMUNICATIONS COOPERATIVE, THE PLAINS, VIRGINIA

FEBRUARY 1, 2000

**Introduction**

Mr. Chairman, Members of the Committee, my name is Bob Phillips. I am President and Chief Executive Officer of the National Rural Telecommunications Cooperative. The NRTC is a not-for-profit cooperative association with a membership of nearly 1,000 rural utilities (550 rural electric cooperatives and 279 rural telephone systems) located throughout 48 States. Our members provide electric or telephone service to underserved, low population density areas of the country.

The NRTC's mission has been to meet the advanced telecommunications needs of American consumers living in underserved areas. In furtherance of that mission, in 1992 the NRTC paid DIRECTV more than \$100 million to capitalize the launch of the Nation's first direct broadcast satellite (DBS) business. In return, the NRTC received program distribution and other rights to market and distribute DIRECTV programming services throughout large portions of underserved, oftentimes rural America. The NRTC, its members, and its affiliates currently market and distribute DIRECTV programming to more than 1.4 million households (more than 20 percent of all DIRECTV subscribers) using digital DBS technology. The NRTC also distributes C-band or large dish satellite programming to some 50,000 subscribers.

In my testimony today I intend to address two problems not addressed by last year's Satellite Home Viewer Improvement Act: first, the unavailability of local television service in rural America and, second, the lack of competition to cable. I'm going to propose a *satellite* solution to both of these problems, and it will require your assistance in the form of a loan guarantee.

**Local Service Is Unavailable Throughout America**

By authorizing the retransmission of local broadcast signals by satellite, last year's satellite bill paved the way for the satellite industry to become a meaningful competitor to cable in *some* of the Nation's top markets. But the bill did nothing to close the digital divide throughout much of the rest of America, where there is no "profit" to be made in delivering local service by satellite.

Because of the bleak economics, the for-profit satellite companies have announced their intention to provide local digital satellite service only to the top 33 markets out of a total of 210. That means that more than half of the Nation's households will not have access to local digital satellite service. At least 20 States will be left out entirely, including eight of the States represented by Members of this Committee. That's unfair, and it's contrary to the public interest.

Americans located in these unserved areas will be disenfranchised from the modern information age simply as a result of where they live. This is unacceptable to the NRTC. I believe it will also be unacceptable to your constituents when they learn that as a result of the satellite bill passed by Congress last year, their urban neighbors are already receiving service they may never receive.

**Satellite Technology is the Only Comprehensive Solution**

It is no coincidence that satellite penetration rates in rural America are six times higher than in urban parts of the country. Satellite is an ideal distribution technology for the less populated areas. Unlike other technologies, satellite is "distance *insensitive*." At a fraction of the investment, satellites can reach where cable and other broadband technologies will never go.

Satellite is ubiquitous. It can cover wide, remote spaces that ground-based technologies will never reach. In fact, any technology other than satellite will be ineffective and piecemeal as a tool to bring local service to the unserved areas.

The cable industry will never build out the entire country. More than 90 percent of the NRTC's 1.4 million satellite subscribers do not even have *access* to cable. Why? Because it costs too much to serve these homes with cable.

It is estimated that in urban areas the capital costs to build out a cable system are more than \$1,200 per subscriber. In unserved and rural areas with low population densities and rough terrain, these costs could easily be four or five times as much or *more*. However, even with substantial start-up costs, the necessary capital per subscriber to provide local digital satellite service in unserved areas should be less than \$300. Distance, terrain, and population density are irrelevant.

We estimate that there are at least 10 million homes that do not have access to cable. *Cablevision*, the cable industry publication, cites statistics from the National Cable Television Association to verify that there are nearly 9 million households unserved by cable.

How much is the cable industry willing to spend to extend their lines to serve these unserved homes? Apparently, not much. According to the FCC, cable companies spent \$7.7 billion in 1998. But the great bulk of that money was for upgrades and rebuilds of existing plant . . . not for the construction of new plant. Many of the large cable companies spent more than half a billion dollars *each* on upgrades and rebuilds. And while \$600 million of the \$7.7 billion was spent for new plant, it was *not* spent to bring service to previously unserved markets. Their "new builds" simply kept pace with the increase in the number of TV households.

Cable has very little or no economic incentive to build new plant to serve homes located in more remote, less densely populated areas. For any given large number of subscribers, satellite is by far a cheaper delivery technology per household than cable. Compared with any terrestrial system, wired or wireless, a satellite system has much greater economic leverage because of its much lower incremental cost in serving subscribers located *anywhere* in the United States.

The rural electric cooperative members of the NRTC have a history of serving remote, rural, and underserved areas. Unlike the cable industry, they have traditionally constructed electric plant and brought electric services to areas with 5 or fewer homes per mile. Their motivation and mission is to bring service to the underserved areas . . . not to cream-skim the lucrative markets.

#### **Competition to Cable**

Mr. Chairman, the NRTC fought the cable industry for nearly 10 years here in Congress to obtain access to programming so we could help build a digital satellite industry to serve rural America. Throughout that debate, the cable industry argued in *favor* of the digital divide. They testified that rural and underserved consumers *should* pay more for their programming because of where they live. We disagreed then, and we disagree now.

Not only can satellite technology provide local service to the *unserved* markets where cable is *not* available, satellite technology can also provide competition to cable in the *underserved* markets where cable *is* available. For the satellite industry to provide effective competition to cable and fulfill the goal of the Satellite Home Viewer Improvement Act, we need to provide local signals.

Every cable consumer in America needs a choice in service providers. Satellite technology can provide that choice. That's why Congress passed the satellite bill last year. But if local digital satellite service doesn't reach every home in the United States and cable becomes the only choice in the markets not served by DIRECTV and EchoStar, cable will never be subject to effective competition. Cable rates will continue to increase, and additional regulation will be required.

Mr. Chairman, access to local service should not be driven solely by concerns of profitability. It's a much bigger issue. All Americans should be entitled to receive the benefits of the modern information age . . . even those living on the other side of the digital divide, where the delivery of local service is not a moneymaker.

To bring local service to unserved areas across the country and to provide competition to cable, we need to agree on a comprehensive, universal plan based on the right technology—not a patchwork of different and incompatible ground-based systems. Only satellite technology holds the promise to serve everyone *and* to provide much needed competition to cable.

#### **Recommendation**

As you said last year, Senator Gramm, "... there are some social goals that are not necessarily met by market forces. ..." That's true here. The marketplace will not fix these problems because there is no money to be made in delivering local satellite signals to these areas.

With your support, we can construct, launch, and operate a satellite system to provide local digital service to all of those areas not served by the for-profit satellite companies. Through a common industry platform, we can solve the problems not addressed by last year's satellite bill. We can make local service a reality for consumers across the country *and* provide meaningful competition to cable.

Getting this job done will require a loan guarantee of at least \$1.25 billion, to be supplemented by the satellite industry as needed.

We also strongly recommend that the loan guarantee program be implemented on a *not-for-profit*, cooperative basis. A not-for-profit approach would ensure that the Federal loan guarantee is not used to enrich large, private, or corporate interests.

Not-for-profit, cooperative utilities have used loan guarantees to deliver electric services to unserved areas since the 1930's. The U.S. Department of Agriculture, through the Rural Utilities Service, is intimately familiar with the challenges facing rural and underserved markets. Rural utilities operating under the RUS program have an excellent record of Federal loan and loan guarantee repayment. Through

the loan guarantee program, these cooperatives can ensure that these same areas are brought into the modern information age.

We recognize that an administering body most likely will need to be created for this purpose. We urge you to establish strong criteria to ensure not only that any loan guarantee will be repaid, but that preferences will be given to plans which will provide the most comprehensive solution and utilize the Federal guarantee in the most efficient manner possible. In this way, you and the Committee can ensure that the public interest will be best served by the use of Federal support.

Mr. Chairman, we also recognize that some of these communications issues are beyond the purview of this Committee. To accomplish our goals, we will need the assistance of other committees as well as the FCC. However, left to its own devices, the FCC will handle this problem in the very same way it has handled countless others: by relying solely on "competition" to fix it. But as you recognized last year, competition will never fix this problem, so we will be working with the Congress, and hopefully the FCC, to obtain the necessary spectrum and orbital location(s) for this project.

Mr. Chairman, if we can get the Congress' help and approval soon, we can use satellite technology to bring service to the last mile *and* to provide meaningful competition to cable. It's a big job, and we need to get started.

Thank you.

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**PREPARED STATEMENT OF DAVID K. MOSKOWITZ**

SENIOR VICE PRESIDENT OF LEGAL AND GENERAL COUNSEL, SECRETARY, AND DIRECTOR  
ECHOSTAR COMMUNICATIONS CORPORATION, LITTLETON, COLORADO

FEBRUARY 1, 2000

Chairman Gramm and distinguished Members of this Committee, thank you for inviting me here today to testify before you about the provision of local broadcast signals to rural subscribers via direct broadcast satellite.

My name is David K. Moskowitz, and I am Senior Vice President of Legal and General Counsel, Secretary, and Director of EchoStar Communications Corporation, a direct broadcast satellite (DBS) company based in Littleton, Colorado. EchoStar was started in 1980 as a manufacturer and distributor of C-band satellite dishes and grew by the mid-1980's into the largest supplier of C-band dishes in the world. EchoStar's founder and CEO, Charlie Ergen, had a vision of a dish in every home, school, and business in the United States, so that we might provide true, effective competition to cable for customers nationwide. In fulfillment of that vision, we have transitioned into the small dish business and have launched five high-powered, direct broadcast satellites since December 1995, with a sixth to be launched this year.

Our goal has always been to provide direct competition to cable television so subscribers might have an alternative to the high prices and historically poor service of monopoly cable companies. Last year, Congress took, in my view, a tentative first step toward giving DBS the right to compete with cable on a more equal footing when it passed the Satellite Home Viewer Improvement Act of 1999. The success of the copyright license given in this bill will turn entirely on its implementation. If implemented properly by the FCC, the law will enable us to provide local signals into the local designated market area (DMA) from which they originate for a sustained period of time (beyond the current 6-month phase-in). The lack of local signals has been the number one reason why consumers, while interested in DBS and displeased with their cable system, have decided against switching from cable to DBS. People want access to their local news, weather, and sports, and the technology of satellites allows us to give them that and more.

Although my company will be able to provide over 50 percent of the population with their local signals, constraints on DBS capacity and prohibitively high costs make it impossible for EchoStar to carry all 1,616 television stations nationwide.<sup>1</sup> We currently carry about 100 television broadcast stations and plan to retransmit approximately another 65 before yearend. We would like to be able to serve each of our rural subscribers with their local signals. EchoStar has a substantial number of customers in rural areas living in C and D counties, which are rural areas as defined by the Bureau of the Census.

As you seek to develop, with your colleagues in the Agriculture Committee, the most appropriate funding mechanism to support the provision of local signals to rural subscribers, we believe that the policy goals underlying this program should

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<sup>1</sup>Federal Communications Commission News Release Broadcast Station Totals as of September 30, 1999 (released November 22, 1999).

be clearly articulated, and the challenges and obstacles involved in its implementation addressed.

#### **What is the Policy Goal?**

Cable television passes 97 percent of the population nationwide.<sup>2</sup> If the goal of a Government loan guarantee is to provide access for rural subscribers to their local television stations, then only 3 percent of the population would need to be targeted by the loan guarantee. The larger problem, however, is the lack of true competitive choice: a much more substantial percentage of Americans, particularly rural consumers, do not have a competitive choice to cable offered on a truly equal footing, even though these viewers may have access to local signals through their cable system. This situation is not satisfactory. With appropriate legislation, and vigilant implementation of the existing laws by the FCC, EchoStar can become a true choice for rural viewers, and a competitor that welcomes the competition from all other sources. The rural funding mechanism should accordingly be based on the fundamental policy of ushering in, and bolstering competition to cable and all other incumbents such as the telephone companies. We believe the intention of any Federal and congressional efforts should be to provide subscribers with the same kind of competitive choices that urban and suburban dwellers could enjoy if the SHVIA is properly implemented. Without such a choice, cable subscribers in rural areas will surely become victims of even deeper price gouging and poorer service by their local cable company, and the "digital divide" will deepen.

In that respect, we were disappointed to see in the final days of the last congressional session that the criteria for loan guarantees would have made the incumbent cable and phone companies eligible. This would have allowed them to more deeply ensconce the advantage they have over consumers with no true competitive choice to cable. We believe this would be a mistake if the ultimate policy goal is to provide equality for rural and city dwellers alike.

#### **Technological Obstacles That Must Be Considered**

We believe one of the primary obstacles that Congress faces in seeking to provide equality to rural subscribers is, ironically, the must-carry requirements passed by Congress in the last session as part of the Satellite Home Viewer Improvement Act. No single provision of the SHVIA hurts rural subscribers more. With every channel that we must carry because of that requirement, our ability to extend local programming to additional markets is reduced by one channel. While neither EchoStar nor the other DBS provider would, at this time, be able to serve the rest of the country absent the must-carry provisions of the SHVIA, many more of your constituents could receive local channels without these provisions.

For EchoStar, to be more specific, the must-carry provisions of the SHVIA mean we serve 33 markets instead of 60. That's the difference between 56 percent of the population and 72 percent of the population nationwide.<sup>3</sup> When must-carry becomes effective, the additional 30 or so stations we may be required to carry in New York and Los Angeles threaten to deprive consumers in 6 television markets of an effective competitor to cable. Moreover, the additional channel space that would be freed up by not being required to carry the same Home Shopping Network channel in every market, would mean that even more unserved markets would receive their local television stations via satellite.

Must-carry is a law that was imposed on cable because of its monopoly status. EchoStar is not a monopoly. Your constituents would be suffering because of a law that, in contrast with cable must-carry, does not resolve any competitive problem.

#### **Technological Obstacles to Serving Rural Subscribers**

In addition to the legal hurdles, technological issues must be addressed in the provision of any satellite service that would carry the local broadcast signals of rural areas.

- Additional spectrum is necessary to carry all 1,616 television stations via satellite. The FCC must identify spectrum in a band that can be used easily in conjunction with the current DBS service, since local signals must be integrated with the other programming offered by DBS services to be of any value to rural consumers.

<sup>2</sup> *In the Matter of Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, Sixth Annual Report, CS Docket No. 99-230 (rel. Jan. 14, 2000), at 12.

<sup>3</sup> Nielsen Media Research, Local Market Universe Estimates for the 1999-2000 Broadcast Season, <http://www.nielsenmedia.com>.

- The FCC has proposed allocating another 500 MHz of spectrum in each direction to DBS, but has proposed to defer this allocation until 2007.<sup>4</sup> This is an excessively long period given the urgent need of rural consumers for competition and for service. While this proposal is consistent with an International Telecommunication Union timeline for this allocation, there is no reason why the United States could not implement that allocation earlier for the benefit of U.S. consumers. In addition, while some of this spectrum is used by the Department of Defense, we understand that this use can be reduced or phased out substantially more quickly. Congress could direct the FCC to allocate that spectrum on a more expedited basis, subject to appropriate conditions relating to servicing rural consumers.
- Assuming that more DBS spectrum could be allocated for commercial purposes, the orbital location of such a service is key. There are three full CONUS (continental United States) locations over the United States and any satellite that plans to carry local stations for rural subscribers must have location compatibility with those satellites. This poses a dilemma for a satellite provider of rural local television stations because there is no one location for that provider that enables compatibility with both EchoStar and DIRECTV.
- Then there is also the issue of the method of encryption a rural satellite service provider might use and its compatibility with the two main service providers. EchoStar and DIRECTV have differing proprietary encryption formats that cannot communicate with one another. A rural local satellite service provider would either have to find a format that is technically compatible with both EchoStar and DIRECTV, or choose one of us over the other. Technological advances may ultimately solve this problem. We believe any service of rural local signals should be compatible with both of the main DBS providers.

After addressing these questions, Congress should tackle the real-life question of economic feasibility that lies at the heart of determining the appropriate level and type of financial support. Subject to overcoming these legal and technical hurdles, DBS would become an excellent conduit for at last bringing local signals and competition to rural subscribers.

From EchoStar's perspective, there is the issue of whether DBS providers can expect to derive enough revenue from providing local signals in rural areas to make a return on their investment. If EchoStar could not answer this question in the affirmative, the investment community would simply refuse to finance the construction of the very expensive additional satellite capacity required to achieve this goal. Added to the satellite costs are the extremely high costs of "backhauling" the signal of each station to the satellite uplink facility. The initial cost of establishing a local loop of fiber in any given television market varies widely—from between \$3,000 to \$50,000 per local station, depending on the city. It also costs between \$120,000 and \$150,000 per station, per year to maintain that feed at an average range of cost per market of between \$480,000 to \$600,000. It is difficult to imagine that in some of the most sparsely populated areas of the country, a provider is able to gain enough subscribers to secure a return on its investment.

### Summary

We believe service to rural subscribers is an important policy goal. If Government loan guarantees are made available, they should not be available to cable companies seeking to further entrench their monopolies. Clearly, the aim of guaranteed loans should be to both serve the unserved subscribers and to provide a competitive choice for those who currently have no alternative to cable. Satellite is the most efficient method to achieve both universal service and parity for rural dwellers in their ability to have a competitive choice. There are several resource, logistical, technical, and economic issues to be addressed in the building and launching of a satellite to provide local signals in rural areas and these issues must be addressed before a provider can move forward. The benefit will come in not only providing video services for rural subscribers, but in providing them with the same kinds of advanced services that, increasingly, will be available via satellite.

Thank you very much for inviting me to testify before you today. I look forward to answering your questions.

<sup>4</sup> *In the Matter of Redesignation of the 17.7–19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7–20.2 GHz and 27.5–30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3–17.8 GHz and 24.75–25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, Notice of Proposed Rulemaking, 13 FCC Rcd 19923 (1998).

**PREPARED STATEMENT OF STEVEN J. COX**  
SENIOR VICE PRESIDENT  
DIRECTV INCORPORATED, EL SEGUNDO, CALIFORNIA  
FEBRUARY 1, 2000

I would like to thank you, Mr. Chairman, for inviting me to appear before the Committee. I appreciate the opportunity to present DIRECTV's views on the issue of Federal loan guarantees to promote satellite delivery of local television signals to rural areas.

DIRECTV has experienced tremendous growth since its inception 5 years ago, and is now the leading provider of direct broadcast satellite (DBS) service in the United States with more than 8 million subscribers, including those customers subscribing to the *PRIMESTAR By DIRECTV* medium-power DBS service. Today, one in every 12 households in the United States has DIRECTV.

Before I begin, I would like to thank Congress for passing the "Satellite Home Viewer Improvement Act." While we did not agree with every provision of that legislation, on balance we viewed it as worthy of our support. Most importantly, the legislation allows satellite TV companies—for the first time—to offer local broadcast network channels. The ability to deliver local content enables DIRECTV—again, for the very first time—to offer consumers a service that is fully competitive with cable television.

We at DIRECTV have moved quickly to bring the benefits of that legislation to consumers. We have publicly stated our commitment to serve at least half of the Nation's TV households—about 50 million households—with local channels. As of today, we are offering local network stations, together with a national PBS feed, in 19 major metropolitan markets. Additional markets will be added in the coming weeks. By the end of the first quarter, we will substantially have met our commitment to serve half of the Nation's TV households with local channels.

This hearing today is focused on those communities we are unlikely to serve with local channels, and the potential role of Federal loan guarantees in expanding this critical element of satellite television. I would like to be clear about DIRECTV's position on the specific issue of loan guarantees. Our ability to broaden the delivery of local channels will not be limited by access to capital. While the availability of loan guarantees may create incentives for some entities to explore expanded local channel offerings, the ultimate deployment of a widespread, satellite-based local channel solution requires the reexamination of much more fundamental legislative and regulatory objectives. Unfortunately, despite the tremendous consumer response we have already received in the areas where we have launched our local channel offering, our ability to expand the benefits of competition to additional communities is being hampered by both statutory and regulatory obstacles. Specifically, the biggest impediment to serving additional communities is the "must-carry" requirement imposed by the Satellite Home Viewer Improvement Act (SHVIA). Even absent that constraint, we are ultimately limited by the spectrum allocated to us by the Federal Communications Commission (FCC). Let me explain.

Unlike cable operators, which have the ability to increase their channel capacity indefinitely, DBS providers face very tangible channel capacity constraints. There are only three DBS orbital slot locations that are "full-CONUS"—that is, capable of serving the entire continental United States. All of the frequencies at those three orbital locations have been licensed by the FCC to DIRECTV and EchoStar. Using digital compression, today we are delivering about 210 channels of programming to subscribers nationwide. That includes entertainment programming, such as CNN, A&E, Discovery, Nickelodeon, and, of course, C-SPAN; sports programming, such as ESPN and regional sports networks; ethnic programming; public interest programming we are required to carry; pay-per-view movies; and special events. In addition, today we are retransmitting more than 75 local broadcast stations to subscribers in the stations' local markets.

The must-carry provision, enacted into law last November as part of the SHVIA, requires us to carry every full-power local broadcast station in a market in which we offer any local channels no later than January 1, 2002. This means that we have to use our limited satellite capacity to deliver stations for which, frankly, there is negligible consumer demand. For example, in both New York and Los Angeles, we could be required to carry up to 23 stations. Many of these stations have, based on their ratings, minuscule audiences. Carrying such a station is a poor use of our limited satellite capacity. The practical implications of this requirement are clear: By imposing must-carry, Congress has decided that it's much more important for us to carry all 23 stations in New York and Los Angeles than to offer the residents of

cities such as Buffalo, Harrisburg, Louisville, Mobile, Omaha, and Providence even a single channel of local content.

In order to maximize the local channel opportunity, we have ordered a new high-power spot-beam satellite. A spot-beam satellite will enable us to make the most efficient use of our existing capacity. I can tell you that we would much rather use that new satellite to extend our local channel offering to additional, smaller markets than to use that satellite to deliver little-watched channels in markets in which we have already substantially satisfied consumer demand for localism.

Even if we were to get relief from the must-carry obligation, we still would not have sufficient available capacity to provide local channels in all 210 television markets in the United States. For direct broadcast satellite to become the full-fledged competitor to cable that Congress desires, we need more spectrum. To achieve this objective, we would urge Congress to direct the FCC to make additional spectrum available to the DBS providers, which could be used to bring local channels to those markets we cannot serve with our existing limited capacity. Because of the substantial costs associated with the delivery of local channels, the only way to make this concept economically workable is for the additional spectrum to be made available to the DBS providers at no cost. In addition, the DBS providers must be able to use the spectrum both for providing local channels, and for other more financially remunerative services. The hundreds of millions of dollars required to build, launch, and operate satellites to use the additional spectrum couldn't be justified if those satellites could only be used to provide services from which we would never see a profit, or even break even. But if we were, in essence, allowed to underwrite the cost of bringing local channels to rural markets by providing other services with the spectrum, we believe it could be a financially viable proposition.

I would point out that more than 2½ years ago, DIRECTV filed a petition for rulemaking seeking additional spectrum to expand our channel capacity. Unfortunately, that petition has sat at the Commission without action. If that petition were to be granted, it would allow both DIRECTV and EchoStar to gain access to additional spectrum that could be used to serve additional markets with local channels.

As I indicated at the outset, the presence or absence of Federal loan guarantees will not impact DIRECTV's incentive or ability to expand the delivery of local channels. Should Congress decide, however, that a Federal loan guaranty program is desirable, I would offer the following comments. First, I believe Members of Congress should clearly identify the problem that they are attempting to address. Is it to ensure that the 3 percent or so of U.S. households that today do not have access to local broadcast channels either via an over-the-air antenna or cable can gain access to their local channels? Or is it to ensure that consumers in rural areas will have the same choice of a fully competitive DBS provider as their friends who happen to reside in the most populous cities? The program should be tailored to address the problem identified by Congress.

Additionally, to the extent that Congress is trying to ensure that rural and urban consumers have the same choices when it comes to selecting a multichannel video provider, I would suggest that a terrestrial or other nonsatellite-based provider of local channels does not meet that goal. A fundamental premise of the recently enacted local-into-local legislation is that consumers do not find the delivery of local channels via a separate delivery mechanism, such as an over-the-air television antenna, to be the equivalent of a single delivery mechanism—such as that used by cable operators—to deliver both local channels and cable programming. Thus, only the satellite delivery of local channels, in a manner that is compatible with the existing DBS services, will meet the expectations of consumers who are unwilling or unable to put up an over-the-air television antenna and will ensure that rural and urban consumers have equivalent video delivery choices.

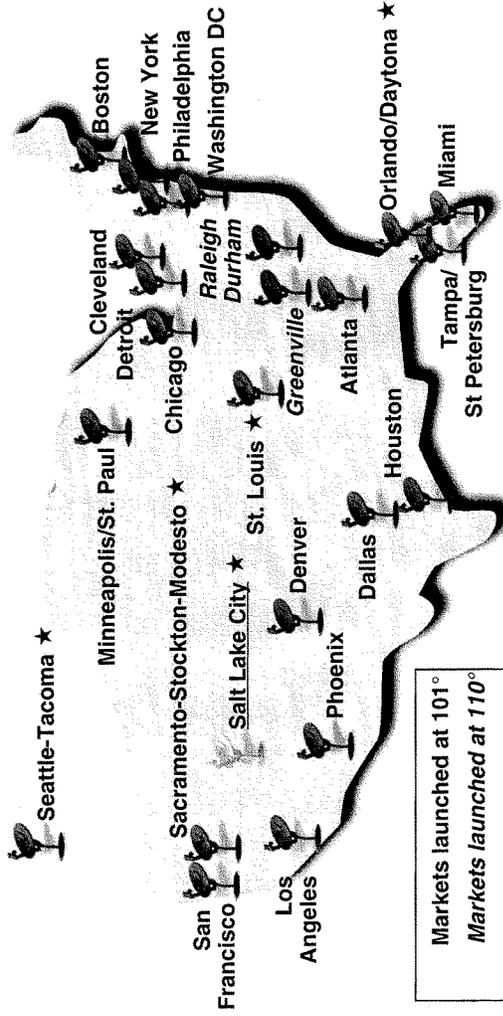
Finally, to the extent that Congress decides to create a Federal loan guarantee program, we believe that taxpayer funding should be used to complement, rather than compete with, service being provided without the benefit of taxpayer subsidies. In other words, those who obtain Federal loan guarantees should be permitted to provide local channel service only in markets where that service is not being provided by the commercial DBS providers.

We look forward to working with Congress to advance these important objectives. Thank you again for the opportunity to testify.

DIRECTV



# Local Channels Market Rollout



**PREPARED STATEMENT OF GREGORY L. ROHDE**

ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION  
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION  
U.S. DEPARTMENT OF COMMERCE

FEBRUARY 1, 2000

Thank you, Mr. Chairman, for inviting me to testify before this Committee on providing loan guarantees to providers to carry local broadcast signals to residents of small, rural local broadcast markets. The Administration believes that the question of how consumers in small and rural markets receive local news and information is very important and deserving of congressional attention.

I can recall well the night the Senate passed the Omnibus Appropriations Act and discussed a proposal to provide loan guarantees for carriers to provide local-into-local broadcast coverage to small and rural markets. I was struck by the fact that when this Administration took office back in 1993, there were no operational direct broadcast satellites (DBS) providing service to viewers. In 1993, there never could have been a debate like that which embroiled the Senate last November over the question as to how small and rural markets would get local-into-local service over satellite systems. Today, there are more than 11 million DBS subscribers. DBS companies are providing local-into-local service in 24 markets and are currently negotiating for the rights to deliver local-into-local broadcasting in 20 more. The question remains, however, as to how viewers in the remaining 200 or more television markets obtain access to local-into-local service.

The Administration strongly supported provisions in the Satellite Home Viewer Improvement Act (SHVIA) that provided authorization to satellite providers to carry local-into-local broadcast programming. The Administration firmly believes that authorizing local-into-local service not only promotes greater access to local television signals for all Americans, but also strengthens DBS providers' ability to provide meaningful competition to cable with comparable program offerings. Unfortunately, markets in which local-into-local broadcasting over satellite systems is not offered will be less likely to enjoy the same competitive benefits. Moreover, in some rural areas, there is no multichannel video programming supplier offering local broadcast signals and many of these communities lay outside of the signal coverage area of their local broadcast stations.

For these reasons, the Administration believes that it is important to find ways to ensure that consumers in rural and small markets have access to local broadcast programming. The Administration is prepared to work closely with the Congress on any proposal to address this issue, including a loan guarantee proposal. We believe that these three principles should guide such legislation. First, the Administration believes that any new program should be *technology neutral* in recognition of the fact that different technologies may best be suited to deliver local broadcasting services to unserved areas in different parts of the country. Technology neutrality can spur innovation and the application of new technologies to address this problem. Second, the program should be crafted to ensure that it *promotes competition* in the multichannel video programming market and encourages future private investment in infrastructure. Finally, the program should demonstrate *fiscal responsibility* by conforming to Federal credit program policies, which minimize Federal exposure to loss and ensure the least expensive, most efficient financing of federally guaranteed loans.

The Administration also believes that the discussion over ensuring local-into-local broadcast programming in the digital era should not be limited to the loan guarantee approach. Thus, the NTIA announced that it will publish a *Federal Register* notice to solicit public comments and suggestions as to how viewers in small and rural markets can receive local broadcast signals. All comments will be posted on the NTIA's Web site (<http://www.ntia.doc.gov>). As part of this effort, I intend to host a roundtable discussion in early March with various stakeholders—consumers, industry representatives, policymakers, and technology experts—to explore ways in which small and rural markets can have access to local programming via satellite and other technologies. Our efforts in this area are intended to complement the congressional action and efforts by the Federal Communications Commission to examine this question as required under the SHVIA. Our intent is to help raise visibility on this issue and contribute to the debate.

Extending the reach of local broadcasting and its crucial news and information has been a longstanding goal of the NTIA. The agency administers the Public Telecommunications Facilities Program (PTFP), which provides grants to establish and extend the reach of local public television and radio stations into unserved areas. Since 1962, the program has been a major factor in the Nation's success in bringing

local public television stations to rural areas—through the establishment of full-power stations, as well as the construction of television translators and repeaters. The PTFP estimates that approximately 94 percent of all Americans can receive at least one free, over-the-air public television signal from a local PBS member-station.

The preservation of local broadcasting in the digital era is vitally important and ensuring that viewers in small and rural markets are included in this new age is critical. The Administration pledges its support to advance the goal of extending the reach of local broadcasting to all Americans and looks forward to working with the Congress on the loan guarantee proposal as well as exploring other approaches to this issue. We would appreciate the opportunity to provide comments on any specific legislative proposal.

Thank you very much.

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**PREPARED STATEMENT OF CHRISTOPHER McLEAN**

ACTING ADMINISTRATOR, RURAL UTILITIES SERVICE  
U.S. DEPARTMENT OF AGRICULTURE

FEBRUARY 1, 2000

Mr. Chairman and Members of the Committee, it is an honor to testify today on the idea of a new loan guarantee program to finance the delivery of local television programming to subscribers of satellite television in rural and small markets. The U.S. Department of Agriculture (USDA) appreciates the Committee's concern, both in the existing coverage of rural access to local broadcasting and the possibility that developing technologies can broaden that problem.

The Rural Utilities Service (RUS) is a rural development agency of the USDA. We administer a \$42 billion loan portfolio of more than 9,000 loans for telecommunications, electric, and water and wastewater infrastructure projects throughout rural America. Our agency also administers the Distance Learning and Telemedicine loan and grant program and is a leading advocate for rural consumers before Federal and State regulatory bodies.

**The RUS Record of Success**

For nearly 65 years the REA and RUS have been empowering rural America. Just this last October, the RUS telecommunications program celebrated its 50th anniversary. In those 50 years, the RUS telecommunications program has helped close the digital divide in rural areas. The telecommunications program has maintained an unprecedented level of loan security over the history of the program.

Since 1993, the RUS has financed more than \$1 billion in fiberoptic facilities and more than \$725 million in digital switching for telecommunications companies and cooperatives serving rural areas. In 1999 alone, the RUS provided nearly \$500 million in financing for rural telecommunications infrastructure. In addition, since its inception in 1993, the RUS Distance Learning and Telemedicine (DLT) program has provided \$83 million in funding to 306 projects in 44 States and two territories.

The RUS is fortunate to have an accomplished corps of engineers, accountants, financial specialists, and rural infrastructure experts. I am confident that the RUS has the necessary skills to administer new initiatives that will bring the benefits of the information revolution to all America.

**The Need for Local Access**

For America's rural residents, access to television signals has long been a challenge. Distance and geography have been significant impediments to the reception of consistently viewable broadcast signals. While cable television is available in many rural towns, it does not reach America's most rural citizens.

Since its inception, satellite-delivered television and now direct broadcast satellite services have provided increased access for communications services to rural residents. Satellite television gave America's many rural residents first time access to vital sources of news, information, educational programming, entertainment, and sports. As good as these services were, satellite services did not connect rural residents to their local communities.

The amendments in 1999 to the Satellite Home Viewer Act (SHVA) dramatically changed the dimensions of satellite service by giving carriers the right to deliver local television signals to viewers via satellite. However, that legislation limited the ability of these carriers to deliver distant network programming to consumers.

Since the enactment of the SHVA amendments, satellite broadcasters have announced significant new initiatives to provide local signals to viewers. Current satellite carriers are offering "local-into-local" service mainly to larger urban markets. There is little evidence that under current conditions significant "local-into-local"

offerings will be made in the markets below the 40 largest markets. The smaller the market, the more rural residents will be impacted.

Once the amendments to the SHVA are fully implemented, many rural residents will likely lose their ability to purchase distant network signals. Many will still be unable to receive a suitable signal via antennae from their local broadcaster. Given the capacity limitations of current satellite providers, and the cost of nationwide local-into-local service, it is doubtful that current carriers will provide local signals to many smaller markets.

The availability of local programming will become more problematic as the television industry converts to a digital system of signal delivery. The propagation of digital signals is different from analog signals. Analog signals fade out with distance from the transmitters. Digital signals drop off suddenly. The likely result is that some current rural viewers of broadcast television may lose their ability to receive a viewable signal once the conversion to digital is complete.

Without the ability to retain and perhaps expand their viewer base, rural broadcasters may not have the financial ability to upgrade their systems. Once digital conversion is complete, the technology will make it likely that rural viewers will be able to receive fewer channels over a conventional TV antenna than currently available in analog mode.

#### **Ensuring Public Safety**

Access to a full range of news, weather, sports, entertainment, and information is certainly important to maintaining and enhancing rural quality of life. But maintaining expanding access to the most local sources of news, weather, and information is critical to rural public safety. The 1999 violent tornado season, and recent weather events such as this months' back-to-back winter storms in the South and East, highlight the importance of local television as a means of disseminating life-saving information.

Linking local residents to their communities of interest is also important to maintaining and enhancing the vitality of the local rural economy and civic life. From both an educational standpoint and one of public safety, it is in the public interest that rural citizens have access to local and network programming. Rural America should not fall into a new digital divide: either as a result of the amendments to the SHVA or the coming conversion to digital television.

#### **Loan Guarantees**

The delivery of local signals to rural viewers will require significant infrastructure investment, regardless of the technology utilized. RUS loans, loan guarantees, and grants have helped bring modern electric, telecommunications, and water infrastructure to the 80 percent of America that is rural. This public-private partnership has been the hallmark of rural infrastructure investment. The RUS is capable of helping rural America meet this new infrastructure challenge.

We welcome the opportunity to comment on any specific legislative language and look forward to working with the Committee. We believe that legislation should be technologically neutral, should expand consumer choice, and be consistent with Federal credit policies.

#### **Conclusion**

Preserving and enhancing access to local and network television signals is important not only for rural quality of life, but for rural public safety and community. Linking rural viewers to more local signals will also enhance the economics of rural broadcasting and their rural advertisers. Moreover, the infrastructure necessary to deliver "local-into-local" services, regardless of mode, can bring new broadband capacity to rural areas. Just as the Rural Electrification Administration helped rural America become part of the national economy, the Rural Utilities Service can help rural America thrive in the information age.

Thank you, Mr. Chairman.

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### **PREPARED STATEMENT OF WILLIAM ROBERTS**

SENIOR ATTORNEY, U.S. COPYRIGHT OFFICE

FEBRUARY 1, 2000

Mr. Chairman and Members of the Committee, the Copyright Office thanks you for this opportunity to appear before the Committee to discuss the provisions of the recently enacted Satellite Home Viewer Improvement Act. Before discussing the provisions of that Act, it is useful to provide a brief background on the legal regime governing copyright licensing for satellite retransmissions of over-the-air television broadcast signals.

The satellite home dish industry had humble beginnings with the introduction in 1980 of the home satellite dish. These large C-band dishes, which originally cost thousands of dollars, were initially marketed to people in rural areas of the country who did not have access to cable television and who could receive few, if any, over-the-air television signals. Owners of these dishes were not required to pay programming fees because satellite signals at that time could be received for free. However, as broadcasters became aware of the C-band dishes, they began to scramble their satellite signals, forcing dish owners to program packagers who would sell them the programming they desired in the same way that cable operators sell programming to their subscribers. These program packagers, who were typically the same concerns that sold the dishes as well, needed to clear the copyrights to the broadcast signals that they were delivering to their customers. In 1986, satellite providers first approached the Congress seeking creation of a compulsory license under the copyright law, similar to that enjoyed by the cable television industry, that would allow them to easily license broadcast programming without engaging in costly face-to-face negotiations with the copyright holders of each and every broadcast program.

In 1988, Congress responded to satellite providers' requests by passing the Satellite Home Viewer Act of 1988. The 1988 Satellite Home Viewer Act created a 6-year statutory compulsory copyright license, codified at section 119 of Title 17, U.S. Code, that allowed satellite providers to clear all copyrights to programming contained on over-the-air television broadcast stations. This was accomplished through a semi-annual submission of royalty fees and statements of account to the Copyright Office. Royalty fees were calculated on a per subscriber, per month basis. The Office took the deposited fees and distributed them to copyright holders of the programming re-transmitted by the satellite providers.

While the section 119 satellite license provided satellite carriers with a simple mechanism for clearing copyrights, it did place restrictions on satellite's ability to deliver network signals to their subscribers. Because the satellite industry lacked the technological capability of providing subscribers with their local network affiliates, satellite carriers were forced to provide their subscribers with network stations taken from distant markets. Thus, for example, a satellite subscriber residing in Montana would receive the network affiliates from Los Angeles and New York, as opposed to network stations from Montana.

This did not please the local network affiliate where satellite subscribers resided, because such subscribers would watch the signals of distant affiliates rather than the local signal. As a result, Congress limited the section 119 compulsory license for network signals to only those subscribers who resided in "unserved households." If a subscriber did not reside in an "unserved household" with respect to a particular network, then a satellite carrier providing a distant station of that same network was liable for copyright infringement. An "unserved household" was a subscriber who, through the use of a conventional outdoor rooftop receiving antenna, could not receive an over-the-air signal of Grade B intensity from the local network station. "Grade B" is a measurement of the strength of a television signal as it arrives at a subscriber's rooftop antenna.

As the satellite industry grew throughout the late 1980's and early 1990's, satellite began to move from rural areas of the country into the cities. Several factors brought about this occurrence, including reduction of the costs of satellite service, the greater numbers of potential subscribers in urban areas, and the introduction of direct broadcast satellite (DBS) service. With DBS, which provides digital quality service using small, dinner plate-sized dishes, consumers in urban areas could subscribe to satellite without the attendant difficulties associated with the placement of a large C-band dish. Unfortunately, with the migration of satellite from rural into urban areas, the potential increased for violations of the "unserved household" restriction of the section 119 license.

Congress addressed this problem in the Satellite Home Viewer Act of 1994. In addition to extending the section 119 compulsory license for an additional 5 years, Congress implemented a transitional challenge scheme designed to weed out those subscribers who did not reside in "unserved households," yet nevertheless were receiving the satellite network service. For a 2-year period (1995-1996), local network broadcasters could issue written challenges to satellite carriers who were serving subscribers with distant network stations inside the local broadcaster's Grade B contour. A "Grade B contour" is the geographic area in which it is predicted that a consumer with an outdoor rooftop receiving antenna can pick up a signal of Grade B intensity from the local network broadcast station.

When a satellite carrier received a written challenge with respect to a particular subscriber, the carrier had two options under the 1994 amendments. The carrier could turn off the subscriber's network service, or conduct a test at the subscriber's household to determine if the subscriber did in fact receive a signal of Grade B in-

tensity. The cost of the test would be allocated to the satellite carrier or the local broadcaster, depending upon the outcome (a "loser pays" provision). Unfortunately, because of the up-front costs associated with conducting household tests, virtually no tests were performed, and many subscribers lost their satellite network service whether or not they resided within an "unserved household." And many satellite carriers continued to sign up urban subscribers and provide them with network signals regardless of their "unserved household" status. These activities prompted certain broadcasters to file copyright infringement lawsuits against certain satellite carriers. Broadcasters were successful in these suits across the board (there is still one pending), and many satellite subscribers lost their network service as a result of injunctions handed down by the courts.

At the end of last year, the section 119 compulsory license was again slated to expire, and Congress again had to address the quandary of "unserved households" and when a satellite subscriber should be eligible for network service. Fortunately, for the first time, there appeared a technological solution to the problem. Because of advances in the DBS industry, it was now possible for DBS providers (EchoStar and DIRECTV) to provide satellite subscribers with the television broadcast signals they most wanted to see: their local TV stations. But such service of local signals is not nationwide. Currently, only those subscribers who reside in large television markets (which, because of their population, represent the greatest number of potential satellite subscribers) can receive their local network signals. While these companies plan to expand their service of local signals in the future, it may be that neither company will serve all 211 television markets across the United States with local signals.

Nevertheless, with the potential of local service as a cure to the headache of the "unserved household" restriction, Congress enacted the Satellite Home Viewer Improvement Act of 1999 and created a new, permanent compulsory license for satellite carriers, codified at section 122 of Title 17, U.S. Code, for the carriage of local television stations. Moreover, Congress extended for another 5 years the section 119 license for the retransmission of distant broadcast signals and amended the communications law to prescribe must-carry and retransmission consent rules for the satellite industry.

Although satellite retransmission of local signals is the long-term solution to the "unserved household" conundrum, it was still necessary to address the issue of when a subscriber is eligible to receive distant network stations from a satellite carrier. The Satellite Home Viewer Improvement Act approaches the problem in several ways. First, the Act grandfathers until December 31, 2004 those DBS subscribers who lost their satellite network service between July 11, 1998 and October 31, 1999 as a result of the lawsuits filed by broadcasters against certain satellite carriers. In addition, those subscribers who continued to receive satellite service of distant networks on October 31, 1999 are also grandfathered, regardless of whether they reside in an unserved household. This grandfathering provision, however, only applies to subscribers who reside outside the Grade A contour of the local network station. The "Grade A contour" is a geographic area, within the Grade B contour of a station, where a signal of Grade A intensity can be received by a consumer with a rooftop antenna. A signal of Grade A intensity is more powerful than a signal of Grade B intensity, and typically covers the area in and around the broadcaster's transmitter, as well as the broadcaster's city of license.

Second, the Act grandfathers all satellite network subscribers using the old-style C-band dishes, regardless of their location, provided that the subscriber lost network service prior to October 31, 1999.

Third, the Act directs the Federal Communications Commission to deliver a report to Congress by November 29, 2000, recommending any changes to the Grade B signal standard that will improve over-the-air receipt of television broadcast signals.

Fourth, the Act provides that the "unserved household" restriction does not apply to recreational vehicles and certain commercial trucks.

Finally, the Satellite Home Viewer Improvement Act provides an avenue of relief for the subscriber who resides in a household that is predicted to receive an over-the-air signal of Grade B intensity, but for some reason does not actually receive such a signal (perhaps a building or stand of trees blocks the subscriber's receipt of a Grade B signal). Such a subscriber may submit a waiver request, through his or her satellite provider, to the local network affiliate asking permission to receive a distant affiliate of that same network from the satellite provider. Upon receipt of the waiver request, the local broadcaster has 30 days in which to grant or reject the request. If the broadcaster does not respond within the 30 days, the waiver is deemed granted. If the broadcaster rejects the request, the subscriber may insist that the satellite provider conduct a test at the subscriber's household to determine if the subscriber actually receives a signal of Grade B intensity from the local net-

work broadcaster. Like the 1994 Satellite Home Viewer Act transitional provisions, the costs of the test are borne by the loser of the test (either the carrier or the broadcaster). However, unlike the 1994 Act, the subscriber has the right to insist that a test be conducted. It is expected that the waiver provision of the 1999 Satellite Home Viewer Improvement Act will provide a real mechanism for determining whether a satellite subscriber can receive a distant network station or is required to watch the local over-the-air signal.

The section 119 compulsory license for distant signals, and the section 122 compulsory license for local signals, comprise the copyright licensing scheme for the retransmission of television broadcast stations by satellite carriers. It is important to note that while the Satellite Home Viewer Improvement Act has created this elaborate licensing mechanism, copyright owners and satellite carriers are always free to negotiate their own licensing agreements outside the compulsory license. In fact, the Copyright Office continues to support marketplace negotiation of copyright licenses and opposes compulsory licenses.

We address the other two elements of the Satellite Home Viewer Improvement Act, must-carry and retransmission consent for satellite, but only briefly because they are communications, rather than copyright provisions. The Act imposes a must-carry requirement, similar to that applicable to the cable industry, on all satellite carriers retransmitting local broadcast signals on or after January 1, 2002. Under must-carry, a satellite carrier will be required to retransmit all eligible local stations to subscribers, and not just network stations, as is the current practice. The Federal Communications Commission has until the end of November 2000 to adopt regulations implementing the must-carry obligation.

The Satellite Home Viewer Improvement Act also establishes retransmission consent for certain local broadcasters for satellite retransmissions of their signals. "Retransmission consent" is a right granted to a broadcaster whereby the broadcaster has the option of deciding whether to allow a retransmission provider to carry its station. Retransmission consent has applied to cable operators carrying broadcast signals since 1993 and will become effective against satellite carriers in May 2000. The Federal Communications Commission is currently in the process of fashioning rules governing the terms and conditions under which retransmission consent must be sought and may be granted.

This is the background and regulation of the satellite industry from the copyright perspective. We are pleased to answer any questions.

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**PREPARED STATEMENT OF DALE N. HATFIELD**

CHIEF, OFFICE OF ENGINEERING AND TECHNOLOGY  
FEDERAL COMMUNICATIONS COMMISSION

FEBRUARY 1, 2000

Mr. Chairman and Members of the Committee, thank you for the opportunity to appear before the Committee today to discuss current Federal communications law and technical and other issues related to the transmission of local television signals to rural areas of the country. Before I begin, I want to clarify that the views I express today are my own, and may not necessarily reflect the views of the Federal Communications Commission (FCC or Commission).

**SHVA Provisions**

First, I want to provide an overview of the most relevant, communications-related provisions of the Satellite Home Viewer Act (SHVA), enacted in 1988, and the more recent Satellite Home Viewer Improvement Act (SHVIA), enacted last November.

Congress enacted the Satellite Home Viewer Act to establish a limited exception to the exclusive programming copyrights held by television networks and their affiliates. It did so because it recognized that some households were unable to receive network signals directly over-the-air. The exception permitted satellite carriers to transmit local TV signals to "unserved" households. The SHVA defined an "unserved household" as one that "cannot receive, through the use of a conventional outdoor rooftop receiving antenna, an over-the-air signal of Grade B intensity (as defined by the Federal Communications Commission)."

Last February, the Commission provided consumers as well as industry with a uniform method for measuring the signal strength at individual locations that was much simpler than the method previously contained in the Commission's rules. In addition, last February, the Commission endorsed a computer model for predicting Grade B strength in lieu of making actual measurements. Known as the "Individual Location Longley-Rice" or "ILLR" model, and similar to the point-to-point predictive

model the Commission had established for digital television (DTV) allocations, the model provided a practical and readily available methodology for predicting signal intensity at individual locations.

#### **SHVIA Provisions**

In November 1999, the Congress enacted the Satellite Home Viewer Improvement Act (SHVIA) to foster competition in the multichannel programming video distribution (MPVD) market and increase programming choices for consumers. The SHVIA amended the copyright law to authorize satellite carriers to retransmit local TV signals to all consumers in a station's local market. (This is commonly referred to as "local-into-local" service.) Until May 29, 2000, satellite carriers can deliver local signals without local broadcasters' permission; after that date, such permission is required. The SHVIA also requires the FCC to take all actions necessary to make a determination regarding licenses or other authorizations that will utilize spectrum otherwise allocated to commercial use for the delivery of local signals to satellite subscribers in unserved and underserved local markets, and to issue a report to Congress by January 1, 2001 on the extent to which such actions have facilitated delivery into unserved and underserved markets. The SHVIA also continues to authorize satellite providers to retransmit distant network signals (*i.e.*, signals originating outside a subscriber's local television market) to unserved households, and grandfather many satellite subscribers who would otherwise not be eligible to receive distant network service.

The SHVIA continues to link the definition of "unserved household" to the FCC's definition of Grade B signal strength. However, under the new law the Commission is required to complete an inquiry to determine whether the Grade B standard continues to be appropriate for determining eligibility for distant network service, report its findings to Congress, and, if appropriate, recommend modifications of the Grade B standard. (Although the statute requires that this inquiry be completed by November 29, 2000, the Federal Communications Commission intends to complete this inquiry by June 1, 2000.)

The SHVIA also requires that, by May 27, 2000, the Commission amend its rules to establish a predictive model for determining whether consumers at individual locations can receive signals of Grade B intensity. The SHVIA specified that the Commission should rely on the ILLR predictive model it endorsed last February, but that improvements should be made to account for terrain, buildings, and other land cover variations. The SHVIA further requires that the Commission establish procedures for continued refinement in applying the ILLR model as additional data become available. The Commission released a Notice of Proposed Rulemaking seeking comment on these issues on January 20, 2000.

#### **Technological Options**

With this overview of the SHVA's and SHVIA's provisions related to local-into-local service and of the Commission's role in its implementation, I want to discuss, first, the various technological options for delivery of television signals to unserved and underserved rural areas, and second, some of the economic, technical, or other barriers or limitations on the viability of those options to provide service to these areas. At the outset, I want to stress that the goal of providing local television programming throughout our country presents significant technical challenges. These challenges stem from the sheer size of our country, areas of rugged terrain, and sparse and isolated populations in some regions.

Advances in communications technology, however, provide a variety of options to address the goal of providing local broadcast service to rural areas. While no one technology may be able to solve the entire problem, multiple technologies can be used in combination to achieve the goal of universal coverage. Local television markets (referred to as "designated market areas" or "DMA's" as defined by Nielsen Media research) vary greatly in size, for example, from the whole State of Utah to much smaller areas in Laredo, Texas, or Salisbury, Maryland. Terrain varies also from the appropriately named Great Plains to the ruggedness of the Rockies and Appalachia. Serving isolated small towns is a very different problem than serving isolated farms. Different geographical situations in all probability will demand different technical solutions.

The existing *direct broadcast satellite (DBS) systems* in the 12 GHz band, such as DIRECTV and EchoStar, provide MPVD to nearly the entire continental United States. In addition, existing DBS providers have begun to provide local programming, but only in the larger markets. This is so even though existing DBS systems were not constructed and deployed with the intention that they would provide local broadcast programming. Present DBS systems generally cover either the whole or half of our country. If such a system is used to transmit a local signal, only users

in a very small part of its footprint can receive the local signal because, under the SHVIA, only users in the local DMA are authorized to receive the signal, while those outside that DMA are precluded from accepting the signal. Moreover, because present DBS systems are not equipped for frequency reuse throughout their footprints, the power used to transmit to those portions of the satellite's footprint that are outside of the DMA would be wasted. While DBS systems can provide 200 or more channels of programming, to provide all of the local channels in every market throughout the country would require more channels than is feasible with currently deployed satellite hardware and existing spectrum.

A new generation of satellites, however, is coming which uses "spot beams," or more focused transmissions from satellite to earth that cover a much smaller area. With this technology, the same downlink frequency can be reused numerous times across the country. This not only increases the capacity of the satellite in terms of the total number of different signals that can be distributed, but the more focused beams also reduce the power required per signal. Spot-beam technology does require larger antennas on the satellite. Thus, what is now a 90-inch antenna on the satellite must be replaced by one that is four to five times larger. However, such large antennas are achievable with today's technology.

The *multichannel multipoint distribution service (MMDS)* is the FCC's designation for a terrestrial fixed wireless service utilizing the 2.5 GHz band of the radio spectrum whose potential uses include multichannel video distribution. Some of this spectrum is shared with educational users, but FCC rules permit sharing by educational and commercial users and many such agreements have been reached. In the past, ownership of MMDS channels was fragmented and it was difficult to assemble a multichannel package that would be attractive to viewers, but industry consolidation along with significant gains in capacity due to digital compression techniques now make such packaging practical. Many of the new owners of MMDS systems, however, see Internet access as a more viable product than video distribution, so it is unclear in what direction the MMDS technology is moving.

The *local multipoint distribution service (LMDS)* is our designation for a fixed wireless access system that operates in the 28 GHz range of the radio spectrum. Because we have allocated over 1,000 MHz of spectrum for this service, LMDS systems are capable of providing a broadband array of two-way voice, data, and video services. Because of the high microwave frequencies involved, the range of LMDS systems is limited to relatively short distances (a few miles) over relatively unobstructed paths. The LMDS is in the early stages of development and the initial focus seems to be on serving business users in urban locations. However, over time, the LMDS may find applications in smaller communities as a way to provide broadband services, including the distribution of television stations.

*TV translators* have traditionally been used in rural areas to extend television coverage. These translators receive a signal on one channel and shift or translate it to another channel for local distribution. For example, if an intervening ridge or mountain blocks reception of a signal, a translator can be placed on the top of the mountain (where reception is good) and used to relay the signal into the otherwise shielded area. Some translators are owned by originating stations, while others are owned by organizations in rural areas. Translators can be an economical solution to extending coverage in small towns and isolated areas when advantageous locations can be found. However, the ongoing transition to DTV complicates the issue of finding frequencies for new translators, especially in areas bordering on metropolitan areas. (I will have more to say about the DTV transition shortly.)

In areas where TV transmission is limited primarily by distance (as opposed to mountainous terrain) and where population density is low, the use of *better performing receiving antenna systems* at residences may be the most cost-effective method of expanding local television station coverage. Improved reception can be achieved by using larger antennas, higher towers, and/or antenna preamplifiers.

*Cable antenna television (CATV) technology* is another technology which has the potential to deliver local television broadcast signals to unserved and underserved parts of the country. The data available to us indicate that cable television service is currently available to about 97 percent of the 100 million television households in the country. However, because this is a national figure, there are certainly some rural and other remote areas of the country where cable service is not as widely available. For example, in some States, such as Montana, Texas, and Wyoming, that have large rural areas with relatively low population densities, the percentage of households that have access to cable service is considerably less than the national average.

Two ongoing developments may enable cable television operators to make new inroads in rural and small communities. First, as is the case throughout much of the communications industry, cable operators are using fiberoptic technology to upgrade

and, in some cases, extend their facilities. Second, as the cable industry deploys state-of-the-art technology, it is also attempting to transform itself into a full service supplier of communications services—voice and data, as well as video. As the industry makes this transition and as consumer demand for advanced communications services grows, cable operators may have new economic incentives to serve rural and small communities currently beyond their reach.

As you evaluate the most effective means to deliver local broadcast service to rural America, it is also important to recall that cable television operators are the only multichannel video programming distributors that have a statutory obligation to provide local television signals to their subscribers. In addition, cable operators are required by law to provide their customers with local broadcast service before any other video service.

I would further point out that, like cable companies, *local telephone companies* are employing fiberoptic technology to upgrade and, in some cases, extend their systems to more distant groups of users. These systems also have the capability of carrying video signals, and because of increased consumer demand for advanced services, telephone companies have very similar incentives to extend their coverage into rural America.

Finally, I would note that several new technologies have been proposed that hold out the potential to serve rural and isolated areas of our country. Some of these proposals have been submitted to the FCC for authorization. The Commission will address these requests in a fair manner and as expeditiously as possible, bearing in mind the goal we all share to provide coverage to unserved and underserved areas of the country.

#### **Digital Television Transition**

All of these approaches are somewhat complicated by the ongoing conversion of television broadcasting from the present analog National Television Systems Committee (NTSC) technology to digital television (DTV). During this transition, all stations will continue with their present NTSC signal. DTV signals will be phased in, starting in the largest markets, at the same time on different frequencies. Thus, at the end of the transition now scheduled for 2006, there will be twice as many signals as at present. Further, the flash cut over to DTV when the transition period ends could be very disruptive if DTV is not phased in appropriately. Finally, while the transition is scheduled to end in 2006, legislation requires that it be extended if certain milestones related to new DTV receiver sales are not met. This uncertainty also complicates the selection of options to extend rural coverage.

#### **Conclusion**

In conclusion, I want to express my gratitude to the Committee for the opportunity to appear before you today. FCC Chairman William Kennard has consistently advocated the deployment of communications services in rural America and, in fact, was one of the early proponents of local-into-local legislation. Chairman Kennard is also committed to implementing the provisions of the SHVIA in an effective and an expeditious manner. Indeed, the Commission has already initiated or has completed two SHVIA implementation proceedings well ahead of the deadlines called for in the SHVIA statute. The first rulemaking proceeding proposed rules related to the good-faith standard to negotiate retransmission consent agreements, and the second proceeding has already adopted procedural rules to process complaints alleging that satellite providers have retransmitted signals without broadcasters' consent.

In sum, the FCC is ready to work with Congress, with the NTIA, the Copyright Office, the Rural Utilities Service, and others to improve television service to rural America.

Thank you very much.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR GRAMS  
FROM RICHARD SJOBERG**

**Q.1.** The primary Federal agency governing the cable industry is the Federal Communications Commission. However, the loan guarantee program that was developed last year assigned responsibility for this program among several agencies including the Rural Utilities Service (RUS) and the National Telecommunications Information Agency (NTIA). Are you confident that these agencies will be attentive to the unique needs of the cable industry?

**A.1.** While I do not have a position about which agency is most qualified to oversee the loan guarantee program, the chosen agency should be knowledgeable about the cable industry and sensitive to its economic, technical, and service characteristics. I'm certain that whichever entity Congress chooses will be responsive to congressional directives, such as ensuring that the rural TV loan guarantee program is technologically neutral.

**Q.2.** Please respond to satellite companies and others who suggest that a high percentage of homes passed or served by cable means that there is less need for cable operators to participate in the loan program.

**A.2.** The fact that cable passes a high percentage of homes has little to do with the problem this bill primarily seeks to address; *i.e.*, how to bring local broadcast signals to communities that today have little or no access to them. Cable operators are well-positioned to use loan guarantees to build out plant to areas that currently are uneconomic to serve (typically areas with 12 or fewer homes per mile of plant). Extending existing facilities may prove to be a much more cost-effective means of serving consumers, and may also prove to be a means for these customers to gain access to other services, like high-speed Internet service through cable modems, which they might not receive today.

**Q.3.** You have testified that a Federal loan guarantee program should be narrowly focused on the most unserved and underserved markets. The Federal loan guarantee program developed last year authorized the Rural Utilities Service to give priority to borrowers based on the population of a market, its terrain, and the projected cost to consumers, among other factors. What other factors should be considered when granting loans to priority borrowers? Is there any one factor that is more important than others when making this determination?

**A.3.** In addition to the factors listed above, the administrator or review board should be instructed to give priority to loans based on the percentage of the project cost that can be attributed to providing service to "unserved" homes, *i.e.*, homes that have absolutely no access to their market's local broadcast signals.

**Q.4.** As someone who has accessed capital from private markets, to what extent do you believe that private capital markets cannot or will not meet the goals of providing financing to those who seek to provide local service in smaller, more rural areas?

**A.4.** My family has invested substantial amounts of private risk capital to bring multichannel video services, including digital cable and high-speed Internet service, to approximately 7,400 customers

in 33 small, rural towns and townships. And I am not alone. Small cable operators across the country have invested private capital in rural and small towns, all without any Government funding. In some communities where population is below 10 to 12 homes per mile of plant, however, the cost of private capital may make it more difficult to obtain.

**Q.5.** How can we be assured that a rural television service loan guarantee program passed by Congress will not have a substantial adverse impact upon competition between the satellite and cable industries?

**A.5.** The best way to assure that competition is not harmed would be to avoid creating a program that subsidizes marketplace competitors who do not need Government help. My DBS competitors are owned by companies with market capitalizations of \$21 billion (EchoStar) and \$16 billion (GM/Hughes) and have annual revenues of \$1 billion to \$6 billion. This program has the potential to make these companies the principal beneficiaries of a taxpayer-supported loan guarantee program to support the building and launching of a new satellite that would retransmit local broadcast signals in markets where they have chosen not to use their existing capacity to deliver local-into-local broadcast service. My company invested private risk capital to build out plant to deliver these same local broadcast signals to consumers.

However, if Congress moves forward with a Federal loan guarantee program, a substantial adverse impact can be minimized if the program is: (1) technology neutral, giving small "Main Street" businesses—whether they are cable, wireless, or others—the opportunity to extend the reach of local broadcast signals; (2) limited, *i.e.*, the loan guarantees are limited to efforts that focus on unserved or areas with the least broadcast coverage; and (3) set up in a manner that minimizes the paperwork burden on applicants.

**Q.6.** How do you determine the costs consumers will face when they seek to obtain local-into-local service? Other than "must-carry" obligations, what specific regulatory policies could be repealed or modified that would help to further reduce the costs of local service to consumers?

**A.6.** The best way of reducing costs to consumers is to ensure that the lowest risk means are used to provide local broadcast service into unserved areas. Opening the bidding to all technologies and reducing paperwork burdens is critical to ensuring that the appropriate providers secure Federal loan guarantees.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR ENZI  
FROM RICHARD SJOBERG**

**Q.1.** I understand from your testimony that you operate a small 23,000 subscriber, 33 town cable system in northwestern Minnesota. You state as well that your association, the National Cable Television Association, supports a technology neutral loan program meaning that the legislation should not favor one technology or industry over another. My State is served almost exclusively by AT&T Cable Services, the Nation's largest cable company, and they can easily go to the capital markets, while your company raises capital in the communities that it serves. Should Congress consider

some limit on the size of the companies that can participate in whatever program is created?

**A.1.** If the goal is to deliver broadcast signals to areas that currently do not get them, Congress may not want to limit the size or number of players eligible for the loans. However, those administering the program should ensure that loan guarantees are not used to underwrite the delivery of broadcast signals to populated, urban areas or communities where EchoStar, DIRECTV, and other multichannel video providers already plan to offer local-into-local service.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR GRAMS  
FROM STEVEN J. COX**

**Q.1.** What is the current channel capacity for DIRECTV? How many of those channels are used to carry video programming? How many of those video programming services are pay-per-view? If there are any vacant channels, what do you plan to put on those channels? Do you have any plans to increase the number of channels you are able to offer? By what means will you increase the number of channels?

**A.1.** Channel capacity on a DBS system is primarily a function of the available bandwidth and the ability to digitally compress programming. Bandwidth at DBS frequencies is currently fixed at 32 frequencies (500 MHz) per orbital slot. Advances in digital compression technologies has increased the number of video channels per frequency from one in the early 1990's to eight or more today. Actual channel capacity on DIRECTV is typically a function of the types of programming carried and varies from day to day. This ranges from sports programming that requires more bandwidth due to detail and high action to movies and news programming that requires less bandwidth to audio programming that requires even less bandwidth. Added to this mix are pay-per-view movies and seasonal sports packages that vary in quantity and bandwidth demands on a daily to monthly basis. At an 8:1 compression ratio, the 46 DIRECTV frequencies at the 101°, 110°, and 119° orbital locations could quite potentially provide more than 350 channels of programming.

DIRECTV is currently utilizing virtually all of its capacity at its 101° orbital position and is quickly developing its recently acquired 110° and 119° orbital capacity. The vacant capacity at the 119° and 110° orbital positions will be filled with additional national, ethnic, public interest, and local broadcast channel programming in the coming months.

DIRECTV is continually exploring ways to increase the capacity of its system. The primary method is through efficiency increases in video compression. Recent advances in compression technologies allowed DIRECTV, at the 101° orbital location, to offer local channels to nearly 50 percent of the U.S. television households using existing receiver and dish hardware. Capacity also can be increased by adding additional bandwidth. This can be accomplished through licensing of additional DBS frequencies by the FCC.

**Q.2.** Under the "Rural Local Broadcast Signal Act" proposed last year, one loan may have been granted for as much as \$625 million,

while other loans could not exceed \$100 million each. Under this proposal, a borrower could receive a \$625 million loan and decide to serve only a small percentage of the smaller, more rural markets that are without local-into-local service. What specific conditions should govern these loans to ensure that more television markets are served with this service?

**A.2.** We believe that to the extent that Congress decides to create a Federal loan guarantee program, taxpayer funding should be used to complement, rather than compete with, service being provided without the benefit of taxpayer subsidies. In other words, those who obtain Federal loan guarantees should be permitted to provide local channel service only in markets where that service is not being provided by the commercial DBS providers.

Second, satellite is the most efficient and cost-effective technology for serving numerous markets throughout the United States. To the extent it is Congress' goal to ensure service to a large number of markets throughout the United States, it should consider focusing the loan guaranty program on satellite technology.

**Q.3.** How can we be assured that a rural television service loan guarantee program passed by Congress will not have substantial impact upon competition between the satellite industry and the cable industry?

**A.3.** According to the FCC's most recent (January 2000) report on competition in video markets, 82 percent of all subscribers to multichannel video program distribution (MVPD) services received their programming from a franchised cable operator. Moreover, the FCC reported that 96.6 percent of U.S. households are passed by cable. Given the market dominance of cable, as demonstrated by these figures, it is difficult to envision a way in which a loan guaranty program could do anything other than promote competition in the multichannel video market. The only exception to this is if cable operators are eligible to receive loan guarantees, which could have the unintended effect of further entrenching the market-dominant incumbent provider and ultimately limiting consumer choice.

**Q.4.** How do you determine the costs consumers will face when they seek to obtain local-into-local service? Other than "must-carry" obligations, what specific regulatory policies could be repealed or modified that would help to further reduce the costs of local service to consumers?

**A.4.** The retail price charged to consumers for local-into-local service is determined based on a variety of factors, primarily including the following:

- (1) the size of the capital investment that is required to offer local channels;
- (2) the amount of the operating expenses required to support local channel service;
- (3) the marketplace pricing for competitive products and services; and
- (4) the estimated elasticity of consumer demand for local channels.

DIRECTV is adding local channels to make its package of services more competitive with cable, thereby attracting more new customers to the overall DIRECTV service.

The must-carry obligation is clearly the biggest impediment to providing additional communities with local channels. But even if DIRECTV were to get relief from the must-carry obligation, we would not have sufficient available capacity to provide local channels in all 210 television markets in the United States. For DBS to become the full-fledged competitor to cable that Congress desires, we need more spectrum. To achieve this objective, we would urge Congress to direct the FCC to make additional spectrum available to the DBS providers, which could be used to bring local channels to those markets we cannot serve with our existing limited capacity. Because of the substantial costs associated with the delivery of local channels, the only way to make this concept economically workable is for the additional spectrum to be made available to the DBS providers at no cost. In addition, the DBS providers must be able to use the spectrum both for providing local channels, and for other more financially remunerative services. The hundreds of millions of dollars required to build, launch, and operate satellites to use the additional spectrum could not be justified if those satellites could only be used to provide services from which we would never see a profit, or even break even. But if we were in essence allowed to underwrite the cost of bringing local channels to rural markets by providing other services with the spectrum, we believe it could be a financially viable proposition.

Over 2½ years ago, DIRECTV filed a petition for rulemaking seeking additional spectrum to expand our channel capacity. Unfortunately, that petition has sat at the Commission without action. If that petition were to be granted, it would allow both DIRECTV and EchoStar to gain access to additional spectrum that could be used to serve additional markets with local channels.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR ENZI  
FROM STEVEN J. COX**

**Q.1.** DIRECTV is [the] largest provider of satellite-based programming in the Nation with over 8 million subscribers and is a subsidiary of General Motors. If this Committee drafts a bill creating loan guarantees, should we make it open to all companies in the business of providing local television service regardless of size, or should it be limited to not-for-profit corporations or smaller companies operating in rural areas?

**A.1.** Should Congress decide to create a Federal loan guarantee program, it should be open to all companies in the business of providing local television service via satellite. The National Association of Broadcasters concurs. As K. James Yager testified before the Committee on behalf of the National Association of Broadcasters, a limit on the eligibility of the existing commercial satellite TV providers “may be counterproductive in achieving the ultimate goal of delivering local signals to unserved areas.”

**Q.2.** I understand that the EchoStar platform and the DIRECTV platform are currently incompatible from the standpoint of satellite locations and encryption standards. What difficulties would a third party provider of local stations create for your customers in rural areas?

**A.2.** The primary compatibility differences between the DIRECTV and EchoStar platforms are the digital transmission format, the encryption format, electronic program guide, and orbital locations. New hardware (receiver and dish) capable of receiving either provider's core programming service along with the third party's local channel service would require the duplication of critical functions within the receiver hardware and a larger and more complex dish resulting in more costly hardware. Additionally, key proprietary information would need to be shared between all three parties to develop this hardware. Such a service would not be backward compatible with existing customers since they would need to purchase all of this new hardware in order to receive the third party's local programming.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR CRAPO  
FROM STEVEN J. COX**

**Q.1.** If the existing proposal is adopted, will every television market receive DBS local-into-local signals and, if so, when? When could Idaho's markets expect local-into-local services?

**A.1.** The extent of the service that will be provided will depend upon the use of the loan guarantees. A loan guarantee program alone, however, will not ensure the greater availability of local channels. It will require significant additional dollars for ongoing operating and marketing costs.

Furthermore, while the availability of loan guarantees may create incentives for some entities to explore expanded local channel offerings, the ultimate deployment of a widespread, satellite-based local channel solution requires the reexamination of much more fundamental legislative and regulatory objectives. Specifically, the biggest impediment to serving additional communities is the "must-carry" requirement imposed by the Satellite Home Viewer Improvement Act (SHVIA). Even absent that constraint, DBS providers are ultimately limited by the spectrum allocated by the FCC.

The costs of delivering local channels to major metropolitan markets are not significantly different from the costs associated with smaller markets, yet the population sizes vary greatly. As a result, the ability to generate enough local subscriptions to justify the local costs decreases as the size of the market decreases.

Among the top 30 U.S. markets, the average population is 1.8 million households. The number of households in each of the three Idaho DMA's is substantially smaller: Boise (#125, 199,760 households); Idaho Falls/Pocatello (#166, 103,840 households); and Twin Falls (#166, 56,850 households). Under the existing must-carry regime, and absent the allocation of new spectrum, it is unlikely that the Idaho markets will receive local channels by satellite.

**Q.2.** What has been the cost of developing, launching, and operating existing DBS systems?

**A.2.** DIRECTV spent \$750 million on the initial launch of the service and, to date, has invested a total of over \$1 billion on the DIRECTV service.

**Q.3.** How much has DIRECTV paid for its existing spectrum and orbital slots?

**A.3.** The FCC allocated DBS spectrum to DIRECTV prior to the date on which Congress authorized the FCC to use auctions to allocate spectrum. DIRECTV pays hundreds of thousands of dollars in annual FCC regulatory fees, as well as tens of thousands of dollars in filing fees in connection with various satellite applications and modifications.

Because of the substantial costs associated with the delivery of local channels, the only way to make the expansion of local channel service economically workable is for the additional spectrum necessary to be made available to the DBS providers at no cost. In addition, the DBS providers must be able to use the spectrum both for providing local channels, and for other more financially remunerative services. The hundreds of millions of dollars required to build, launch, and operate satellites to use the additional spectrum could not be justified if those satellites could only be used to provide services from which we would never see a profit, or even break even. But if we were in essence allowed to underwrite the cost of bringing local channels to rural markets by providing other services with the spectrum, we believe it could be a financially viable proposition.

**Q.4.** Is the cost of developing, launching, and operating a spot-beam satellite expected to be higher than that of existing direct broadcast satellites?

**A.4.** Yes. A spot-beam satellite is technically more complex (more transponders, more complex antennas, higher power satellite) than the typical direct broadcast satellite that provides full CONUS coverage. Additionally, a spot-beam satellite may require, depending on the number and location of the spot beams, regional uplink centers, further adding to the costs of operating the system.

**Q.5.** What is the anticipated cost of securing spectrum and orbital slots, as well as launching and operating satellites?

**A.5.** The ultimate cost would depend upon the process used by the FCC to allocate spectrum, should it decide to make available additional frequencies suitable for use by the DBS operators.

**Q.6.** How many satellites would it take to deliver local signals in DMA markets 30–210?

**A.6.** An accurate answer to this question is difficult to provide since it requires that a detailed technical study be completed. In the absence of such a study, the following provides a maximum number based on the use of CONUS satellites. Markets 30 to 210 represent nearly 1,200 broadcast stations across the United States. Assuming that each and every one of these stations is carried, as may be required, up to 2 GHz of bandwidth would be required. This translates to four equivalent DBS orbital positions or as many as 12 satellites. (DIRECTV currently has three satellites at its prime 101° orbital position). Using spot-beam technology would reduce the bandwidth required, although a specific response would require a substantial technical undertaking.

**Q.7.** What orbital positions could house those satellites?

**A.7.** The most logical location to support the delivery of services to existing DBS subscribers is somewhere along the 101° to 119° WL

arc, which is the range within which the existing DBS operators provide service.

**Q.8.** Would these be full CONUS locations?

**A.8.** Yes, the locations along that arc are full CONUS.

**Q.9.** Would viewers be able to view local signals using existing satellite receivers? If not, how many would be required?

**A.9.** Conceptually, local channels could be broadcast in a manner that subscribers to both DIRECTV and EchoStar could access, although there are substantial technical challenges and proprietary technology-sharing issues that would need to be resolved. Such a "shared service" would require both a new receiver (set top box) and a new satellite dish. Existing customers would need to purchase this new hardware in order to receive the third party's local programming.

**Q.10.** Can the existing DBS systems currently provide broadband Internet access? Do they currently offer broadband Internet access? Are they expected to?

**A.10.** Broadband Internet service can be offered via satellite either as a "one-way" satellite service with a telephone-based return path or as a "two-way" satellite service with a satellite-based return path. Divisions of Hughes Electronics, DIRECTV's parent company, are offering a one-way broadband Internet service, DIRECPC®, at present and are currently developing "two-way" broadband Internet services for future launch.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR ENZI  
FROM GREGORY L. ROHDE**

**Q.1.** Several of the witnesses expressed concern that a new bureaucracy could result from this legislation. Which agency would be best suited to administer a loan guarantee program for providing local stations in rural markets?

**A.1.** The Administration believes that if a new loan guarantee program is enacted to promote the provision of local television service in rural America, it should be administered by the Department of Agriculture's Rural Utilities Service (RUS). The fundamental mission of the RUS, successor to the Rural Electrification Administration, is to promote infrastructure investment in rural America. The agency certainly has the expertise and experience to administer such a new loan guarantee program for rural television service. The RUS manages \$4 billion annually in loan and loan guarantees, and a total portfolio of more than \$42 billion in outstanding loans to electric, telecommunications, water, and wastewater utilities serving in rural areas. In addition, the RUS administers the Distance Learning and Telemedicine loan and grant program.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR ENZI  
FROM WILLIAM ROBERTS**

**Q.1.** In your testimony you outlined the situation facing satellite customers and providers prior to the passage of the Satellite Home Viewer Improvement Act. In your opinion, has the intent of the SHVIA been carried out by all parties involved and are you seeing

that satellite customers are satisfied with the work that Congress did last year?

**A.1.** Given the fact that the Satellite Home Viewer Improvement Act (SHVIA) is less than 3 months old, and that many changes made by the Act require implementation through rulemaking proceedings by the Federal Communications Commission which have yet to be completed (and, in some instances, have not yet begun), it is too early to tell if the SHVIA is a success. We will be glad to inform you of our impressions once the statute has been allowed to fully operate and we receive input from the public.

**Q.2.** What should Congress have included in the legislation that would have improved the ability of all satellite subscribers to receive network stations?

**A.2.** As we stated in our 1997 Report to Congress on the satellite copyright compulsory license, we are concerned with the test for determining when a satellite subscriber is eligible for satellite network service (that he or she does not receive an over-the-air signal of Grade B intensity) as it is applied to the individual household. Our past experience has been that tests were not performed at subscribers' households because the cost of the test to the satellite carrier exceeded the potential revenue from the subscriber for network signals. This left many thousands of subscribers without recourse. While the improvements made by the Satellite Home Viewer Improvement Act—such as the Individual Located Longley-Rice model which predicts geographic areas where the average subscriber will not receive an over-the-air signal of Grade B intensity, and the waiver process which allows a subscriber to petition their local broadcaster for a waiver to receive satellite network service—will unquestionably reduce the total number of subscribers without any network service, we believe that there still will be satellite subscribers who cannot get satellite network service, even though these subscribers do not receive an over-the-air picture from the local network broadcaster.

The ultimate solution to this problem is more local signals being offered by satellite carriers in more markets. Any incentives that Congress can establish—such as a loan guarantee program—to encourage the delivery of local stations by satellite should certainly be encouraged.

**Q.3.** One of the solutions offered last year to bridge the gap between the passage of the SHVIA and the availability of local stations in every market was a blanket waiver for rural State households to receive distant signals without having to worry about whether or not they qualified as an “unserved household.” What are your thoughts on such a proposal?

**A.3.** In order to apply a blanket waiver, one must still determine when a geographic area of the country is “rural”—*i.e.*, does not receive an over-the-air signal of a network station. If an area truly is “rural,” then the households in that region are unserved households and can receive distant network stations. There is no need for a waiver. If the region can receive an over-the-air signal from a network station, then it is not “rural” for purposes of that television network.

The point of the unserved household limitation is to direct subscribers located near a network affiliate that can receive an over-the-air signal to watch the local affiliate, as opposed to a distant affiliate of the same network provided by the satellite carrier. The satellite compulsory license is not intended to threaten the local affiliate's market by permitting satellite subscribers to gain access to a distant network station when they are able to receive an over-the-air picture from the local affiliate. This is true whether the subscriber lives in a "rural" State or an "urban" State. Someone who lives a mile away from the transmitter for KGWC, a CBS affiliate in Casper, Wyoming, and has no difficulty receiving the KGWC signal should not be permitted to receive the Denver CBS affiliate from satellite in lieu of the local KGWC station.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR GRAMS  
FROM DALE N. HATFIELD**

**Q.1.** Section 714 of the 1996 Telecommunications Act established a "Telecommunications Development Fund" by which small businesses could apply for loans to deliver telecommunications services to unserved rural areas. Are companies entitled to use these funds? If not, should the authority for this fund be expanded to help facilitate the deployment of local service in unserved areas?

**A.1.** The Telecommunications Development Fund (TDF) was established to promote access to capital for small businesses to enhance competition, to stimulate new technology, and to promote training, employment, and telecommunications services. Since its 1996 authorization as a private corporation, the TDF has received approximately \$25 million in interest paid by financial institutions.

The TDF established itself as a venture capital fund that makes equity investments in small, early stage communications companies. Given the size of the TDF's fund, it anticipates making approximately 10 to 12 investments in order to ensure a diversified portfolio, and in accordance with prudent investment practices.

The purpose of the rural satellite loan guarantee legislation, however, is to enable satellite or cable carriers to receive loan guarantees that would enable them to deliver local television signals via satellite or by some other means of transmission. Such businesses usually have capital requirements far in excess of the investment size that would be prudent for the TDF to make. Therefore, the TDF does not appear to be an appropriate entity "to help facilitate the deployment of local service in unserved areas."

**Q.2.** The proposed loan guarantee program included a provision that prohibited any satellite companies with unused spectrum that could be used to provide local service from applying for a loan guarantee. Does this prohibition apply to EchoStar and DIRECTV? At what point does the spectrum have to be used? Is it at the point the application is filed, or at the time the application is granted?

**A.2.** Although the proposed legislation does not address the specific points raised by this question, the prohibition would presumably apply to both EchoStar and DIRECTV if they applied for the loan guarantee program. Satellite licensees normally have milestones in which to construct, launch, and operate their licensed satellites. At the present time, DIRECTV has utilized all of its authorized DBS

orbital locations by launching satellites. EchoStar, however, has one DBS orbital assignment that it purchased at auction that is currently unoccupied. EchoStar's plans to implement that location at 148° WL were delayed due to some technical problems with one of its satellites. It has filed a request that the Commission find it has met its due diligence obligations for that location. In addition, EchoStar has a preliminary assignment of channels at 175° WL for which it has requested an extension of its due diligence deadlines. The current version of the proposed legislation does not specify when the prohibition would apply.

In addition, both DIRECTV's parent corporation and EchoStar have interests in Ku- and Ka-band fixed satellite orbital locations. Those locations are not specifically allocated to DBS, but could be used for delivery of video programming such as local signals. Some authorizations at those locations are currently unused.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR ENZI  
FROM DALE N. HATFIELD**

**Q.1.** The FCC is the agency responsible for assigning spectrum and orbital slots. In the past, the Commission has auctioned off both spectrum and orbital slots to companies wishing to provide direct broadcast satellite services. Those auctions involved some of the largest media companies in the world and the stakes were very high. If the Congress authorizes some form of a loan guarantee program targeting the satellite industry, what assurances can the Commission make that the spectrum and orbital slots will be used to provide local television stations in rural areas?

**A.1.** In licensing satellite systems, the Commission has the authority to impose conditions on operators. If the Commission were to auction spectrum that would be used by companies participating in such a loan guarantee program, it could require that auction participants certify that they would use any spectrum acquired to provide local television channels in rural areas and any licenses issued as a result of an auction could be so conditioned.

**Q.2.** We have heard from the National Rural Telecommunications Cooperative about the cost of the spectrum and the orbital slot. How much do you think it might cost to launch a satellite-based service to provide local television service in rural markets?

**A.2.** The cost to build and launch a spot-beam geostationary DBS can range from \$200–\$300 million. This does not include the cost of the orbital location or the cost of developing or purchasing a distribution system.

**Q.3.** The Satellite Home Viewer Improvement Act authorized several new rulemakings in the areas of retransmission consent and signal standards that must be completed by the end of this year. What additional rules and regulations does the Commission envision necessary to implement portions of any loan guarantee program under its jurisdiction?

**A.3.** The Commission does not envision any additional rules and regulations to be necessary since there is no portion of "any loan guarantee program under its jurisdiction."

**Q.4.** Several of the witnesses expressed concern that a new bureaucracy could result from this legislation. Which agency would be best suited to administer a loan guarantee program for providing local stations in rural markets?

**A.4.** The Commission does not have the financial expertise required to recommend a particular agency to administer a loan guarantee program designed to facilitate access to local television broadcast signals. The Commission, however, recognizes the benefits of the approach outlined in S. 2097, which assigns the responsibilities for approving loan guarantees and administering the loan guarantee program to separate entities.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR CRAPO  
FROM DALE N. HATFIELD**

**Q.1.** The FCC is expected to issue a determination on must-carry digital television standard requirements for cable television. Would this provision apply to satellite broadcasters?

**A.1.** The Communications Act of 1934, as amended by the Cable Television Consumer Protection and Competition Act of 1992, directed the Commission to begin a proceeding to determine whether changes in our mandatory carriage rules are necessary to accommodate digital broadcast television signals on only cable television systems. Thus, the proceeding currently underway at the Commission does not address obligations of satellite television providers to carry local digital broadcast television signals.

**Q.2.** Is the FCC expected to issue a determination on must-carry digital television standards for satellite broadcasters?

**A.2.** Beginning on January 1, 2002, the Satellite Home Viewer Improvement Act of 1999 requires satellite carriers that elect to provide at least one local broadcast signal in a market to carry all other local broadcast stations requesting carriage in that market. The law requires the Commission, within 1 year of enactment, to establish regulations to implement the carriage obligations of satellite carriers. The statute also specifically directs the Commission to adopt carriage requirements for satellite carriers that are comparable to those imposed on cable television operators.

**Q.3.** Using spot-beam technology, how much spectrum will be required to serve DMA markets 30–210?

**A.3.** The amount of spectrum needed will depend on a number of factors, including the frequency band used, the size or the type of transmitting antenna (this determines the size of service area of the spot beams), and the quality and type of service provided (high definition video and sports programming, for example, may require more spectrum). Taking these considerations into account, a rough estimate might be that approximately 2 MHz of spectrum would be required for each local TV channel. Assuming a frequency re-use factor of 4 (due to use of spot beams), and assuming there is an average of seven local TV channels per DMA market, 630 MHz of spectrum would be required to deliver all of the local channels (assuming a must-carry requirement) in 180 DMA's (markets 30–210).

**Q.4.** What was the purchase price for spectrum, used by DBS providers, in the last FCC auction? What was the cost of the most recent orbital slot acquisition by a DBS provider?

**A.4.** From January 24, 1996 through January 26, 1996, the FCC auctioned two direct broadcast satellite (DBS) construction permits. The first permit, for the use of 28 channels in the 110° WL, offering full nationwide coverage, was awarded after 19 rounds to MCI Telecom Corp., with a winning bid of \$682.5 million. The second permit, for use of 24 channels in the 148° WL, was awarded after 25 rounds to EchoStar DBS Corp., with a winning bid of \$52.3 million. The 148° WL offers coverage for most of the United States with the exclusion of parts of the East Coast.

**Q.5.** How many satellites would it take to deliver local signals in DMA markets 30–210?

**A.5.** Many direct broadcast satellites in service today use 16 transponders, but the number of transponders a DBS licensee will decide to place on a given future satellite is difficult to predict. There are many considerations, including power requirements. Assuming that each satellite will have 16 transponders, approximately four satellites would be needed. Assuming that each satellite will have eight transponders, approximately seven would be needed.

**Q.6.** What orbital positions could house these satellites?

**A.6.** DBS licensees may choose to move their satellites, and use a satellite orbit location where they already have an operational satellite, to provide local channels. The specific factors relevant to such decisions involve a wide range of business planning factors that would be difficult for us to predict. However, there are DBS orbit locations for which we do not currently have operational direct broadcast satellites on all available channels. These locations, which could certainly be used for provision of local television channels, are as follows: 61.5° WL on some channels, and at 148° WL, 157° WL, 166° WL, and 175° WL.

In addition, orbital locations in the fixed satellite service allocations at Ku- or Ka-band could also be used. The Ku-band is heavily used at the current time, while the Ka-band has 14 authorized but not yet operational systems.

**Q.7.** Would these be full CONUS locations?

**A.7.** All full CONUS locations in the existing 12 GHz DBS allocation to the United States are being used. The 61.5° WL location is not quite a full CONUS location, but could be used to serve most of the contiguous 48 States with the exception of the Northwest United States. The 148° WL location could be used to serve most of the contiguous 48 States, but cannot serve the Northeastern United States. At the satellite locations further to the west, there is increasingly limited coverage of the Eastern United States. The 148° WL, 157° WL, 166° WL, and 175° WL locations could be used to provide service to Alaska and Hawaii.

In addition, other frequency bands could be used to provide local TV channels. In the Ku- and Ka-band FSS allocations, there are both full CONUS and non-full CONUS orbital locations that would be potentially usable.

**Q.8.** Would viewers be able to view local signals using existing satellite receivers? If not, how many would be required?

**A.8.** Viewers/DBS customers could use a standard DBS receiver to view local channels. However, if the local channels are being provided from a different orbital satellite location than other DBS programming, a consumer may need a slightly larger receive dish with two (or more) "feed horns" in order to receive signals. Alternatively, a consumer may need a second receive dish if they wish to receive signals from satellites that are significantly separated in orbit from the current CONUS coverage satellites at 119° WL, 110° WL, and 101° WL. In addition, for a dish receiving from multiple orbital locations, the viewer will need a new set top receiver. Also, if the local signals were delivered using a non-DBS frequency band, such as the Ka-band, a new set top receiver would be required.



## **LOAN GUARANTEES AND RURAL TELEVISION SERVICE**

**WEDNESDAY, FEBRUARY 9, 2000**

U.S. SENATE,  
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,  
*Washington, DC.*

The Committee met at 11:03 a.m., in room SD-628 of the Dirksen Senate Office Building, Senator Phil Gramm (Chairman of the Committee) presiding.

### **OPENING STATEMENT OF CHAIRMAN PHIL GRAMM**

Chairman GRAMM. Let me call the Committee to order.

First of all, I want to apologize to everybody. We had scheduled the hearing for 10 a.m., but we had a Republican conference this morning and since many of our Members would have been denied the right to testify, and I would have been denied the right to hear them, we rescheduled the hearing to begin at 11 a.m. I want to thank each of you for coming.

We are in the process of putting together a loan guarantee program that will do everything economically feasible to encourage investment in a system that will bring local television signals to every household, to every farm and village in rural America.

We believe it is important in putting this proposal together that it be financially prudent and that it protect the taxpayers' interest. The best check we have to assure that we actually get the signals to rural America is a requirement that those who are making the investment be investing their own money, that they commit their assets, and that we blend together a loan guarantee with private capital. There is nothing that so brings the mind to focus on the task in front of you than having your own capital, your own assets, your own money at stake.

I want to say here that I have been working very closely with Senator Burns, the author of this bill. Without his leadership, we wouldn't be here. He and I are trying to put together a bill that we can move forward together.

Senator Lugar said it yesterday, and I will repeat it here: It is exciting to think about rural America having access to local television. Whatever we can do, consistent with protecting the taxpayers' interest, we are going to do. I would add that if the process fails, if loans are defaulted, we end up with the worst of both worlds. We end up with no transmission of local signals, and we end up with the taxpayer losing potentially \$1.25 billion.

I am very happy to have our colleagues here today. I want to welcome each and every one of them: Conrad Burns from Montana,

who is the author of this bill; Tim Hutchinson from Arkansas; Craig Thomas from Wyoming; and welcome Blanche Lincoln from Arkansas. Senator Burns, would you please begin.

**OPENING STATEMENT OF CONRAD BURNS  
A U.S. SENATOR FROM THE STATE OF MONTANA**

Senator BURNS. Thank you very much, Mr. Chairman. My statement will be very short today as we look at this issue and move it along. I want to thank you, for your office and your staff have been very good to work with. You made the commitment that we would get this done early in this session of the 106th Congress, and you have shown your willingness to do that. You made the commitment to move this along, and I am very appreciative.

I believe it's going to take a cooperative and collaborative effort in order to pass a piece of legislation that, as you stated, protects the taxpayer, but also does some things in rural America that we sorely need.

Mr. Chairman, when I offered the loan guarantee on the Satellite Home Viewer Improvement Act, it was apparent to me that we were only going to get about 40 of the largest markets in the satellite broadcast industry to fulfill the requirement of providing local-into-local service. By the way, I offer my congratulations to you for keeping this technology-neutral. That is very important because it allows the landscape of competition, which has been the best regulator over the years on ingenuity and entrepreneurship to get this done.

But I also would be remiss if I didn't recognize that a lot of local radio and television stations would be left out as we passed that Satellite Home Viewer Improvement Act. Rural areas, especially rural areas where they depend on the local broadcaster for their news, weather, and information, would be left out. In the State of Montana, we have the highest per capita ownership of satellite dishes of any place in the country. The ownership of satellite dishes is high in many rural States. I would imagine that Texas has a great preponderance of people leaning toward satellite broadcast. They, too, want to receive their local station because that provides their local news. That is where they get their local information, farm and ranch news, weather, and so on. They cannot be left out of this mix.

I initially proposed the rural viewer amendment because I was concerned that without it, only the largest television markets in America would receive local-into-local service authorized by the Satellite Home Viewer Improvement Act. These would be the big, profitable markets—New York, Los Angeles, Chicago—where the big get bigger, but the small just don't have the capital with which to compete. Even the most optimistic local-into-local plans will require 2–3 years to employ and then to only about 70 of the 210 television markets in the United States.

Like I said, it is very important in this country, in the movement of information, that we have local broadcasters fulfilling their responsibilities to those communities.

What about the other 140 markets? In Montana, I have the smallest market, number 258 on the scale. I am in a State that is almost as big as Texas, but not quite.

Chairman GRAMM. Let's not get carried away, Senator.  
[Laughter.]

Senator BURNS. Well, if we were to roll it out flat, if we were to iron it out flat, we would be bigger than you.

Nonetheless, these markets and the folks that live in these areas should be rewarded by their local broadcasters just the same as anybody else. The ability to receive local television signals is more than just having access to local sports or entertainment programming. It is a critical and immediate way to receive important local news, weather, and community information. Of course, we live in an area where weather plays a big part.

I want to congratulate my colleague from Texas because he has picked up an interest in this, and we believe it is very important for the State of Montana as we move this information forward. I would also thank my friend from Wyoming and my friends from Arkansas who feel strongly about this. With over-the-air broadcast signals and cable delivery limited because of distance or the geography of our States, satellite television has become very important. I believe how we broadcast our local-into-local services will be just as important.

I appreciate this opportunity. I will not go through the bill, but I believe all the makings are there, including the building blocks that protect the taxpayer. It is technology neutral, and it is something that the broadcast industry can work with. They can make it work with just a little help from the U.S. Government.

I thank you for your efforts on this particular issue. I thank you very much. I yield the remainder of my time.

Chairman GRAMM. Thank you, Senator Burns.  
Senator Hutchinson.

**OPENING STATEMENT OF TIM HUTCHINSON  
A U.S. SENATOR FROM THE STATE OF ARKANSAS**

Senator HUTCHINSON. Thank you very much, Mr. Chairman. I want to commend Senator Burns for his outstanding work on this issue, and I am glad to join Senator Thomas and my colleague from Arkansas, Senator Lincoln, this morning. Thank you for affording us the opportunity.

Members of the Committee, thank you for allowing me to speak on behalf of my constituents who will benefit from satellite companies being allowed to provide local programming, and a Federal loan guarantee program that will assist the industry in reaching that goal.

Arkansas, like Montana, is a rural State. The rugged terrain of the Ozark and Ouachita Mountains means that many Arkansans are so far removed from over-the-air signal and cable providers that they must rely on satellite service as their sole source of television programming.

I have heard from hundreds of Arkansans who are concerned about their network programming and want local television signals through their satellite providers. That is why I am here today. I want to join with my colleagues, not only those that are here today but all of my colleagues from rural States, in support of a Federal loan guarantee program whose goal is providing unserved Americans with local television programming.

I supported the Satellite Home Viewer Improvement Act because it ensured that our constituents in unserved areas would keep their network satellite programming and will be able to enjoy local programming someday. The challenges created by requiring satellite companies to provide local-into-local service is another reason why I am here today.

In order to reach our goal, I believe that satellite technology is an efficient way to deliver that local programming. However, that is not to say that cable companies and cooperatives may not be the best medium in certain areas.

We know that the technology and infrastructure needed to provide rural, unserved Americans with local television signals is both underdeveloped and expensive. A loan guarantee program will assist companies in complying with must-carry rules and expedite the proliferation of technology needed to provide local programming to rural customers in States like Arkansas.

Rural communities in my State are very close-knit communities. The local news and weather, as Senator Burns said, are important to the families living there. Some people may think that we are going to a lot of trouble to make sure our rural, unserved constituents have access to local programming. While it is nice that all Arkansans would be able to watch our beloved Razorbacks, there are far more important reasons why we need to continue our efforts.

One of the benefits of providing local channels is the ability to inform Arkansans of dangerous weather. Like Montana, we face a lot of serious weather, but tornados in particular. I know the Senator from Texas will recognize the severity. We have not only a great deal of property damage every year, but lives that are lost every year. The ability to respond quickly to sudden changes in the weather may mean the difference between life and death.

Another reason I am here testifying today is because I want my constituents to have access to the very best technology available, no matter where they choose to live. It is clear that many rural communities in my home State are not served because providing them with reliable programming is not "cost-effective." That is very understandable.

There is precedent, as all of you know, for the Federal Government helping in rural areas, whether it is helping with electrification or telephones. I don't know that we can put a price tag on the opportunities communities are given when they have technology available to them. I believe we have the resources to allow Americans living in rural areas to benefit from the technology revolution. Americans in rural areas should not be left out.

Mr. Chairman, I appreciate your commitment to writing a loan guarantee program that maximizes the probability that the loans will be paid back and your determination to move legislation prior to the March 30 deadline. I want to commend you and the other Members of the Committee for what you are doing to ensure that rural, unserved constituents have access to local programming.

Thank you for affording me the opportunity to testify today.

Chairman GRAMM. Thank you, Senator Hutchinson.  
Senator Thomas.

**OPENING STATEMENT OF CRAIG THOMAS  
A U.S. SENATOR FROM THE STATE OF WYOMING**

Senator THOMAS. Thank you, Mr. Chairman. It is always a great pleasure to testify when you know your fellow testifiers are well-informed and intelligent because they agree with me.

[Laughter.]

I am basically going to say the same thing. I do want to lend my support, however, and join with my colleague, Senator Enzi, in support of this as it affects our State. This proposal will bring hope to over 50 million homes in 170 television markets that otherwise would not receive local signals via satellite.

I want to commend Senator Burns for his work on this provision. He and I sent out a letter some time ago, and I believe that letter attracted a broad base of support for this type of proposal. I also want to commend you, Mr. Chairman, for what you have done. I was one of the group that gathered when we had this bill passed last fall to get this part of it done.

I won't repeat what has already been said, but, without this, under the best-case scenario, only 40 of the 210 television markets will have local service via satellite, none of which are in my State. You can understand why this is so very important to us. There is vital information that people need which can be obtained from television, not only the news but the weather, school closings, road reports, and so on.

I am with you, Mr. Chairman, in that we want to make sure this is a sound financial proposition, and I believe it can be. I believe the USDA's Rural Utilities Service has the expertise to administer this loan guarantee program. I come from being Manager of the Wyoming Rural Electric Association, so we have had some experience in this kind of thing.

In any event, anything I can do to be helpful, Mr. Chairman, I want to do. I commend you and the Members of the Committee and hope we can move forward quickly.

Thank you.

Chairman GRAMM. Thank you, Senator Thomas.

I want to welcome Senator Lincoln from Arkansas. I believe we sometimes forget what a rough place the U.S. Senate is. I remember when Senator Lincoln first came here, she seemed so young. Now she is walking around with a cane.

[Laughter.]

I hope people take into account the great sacrifice that we make in being here.

Senator Lincoln.

**OPENING STATEMENT OF BLANCHE LINCOLN  
A U.S. SENATOR FROM THE STATE OF ARKANSAS**

Senator LINCOLN. Thank you, Mr. Chairman, and I appreciate your willingness and genuineness in holding this hearing on a very important issue. I did just come from the Agriculture Committee where the surroundings were not quite as easy, and I did trip on a television cord. I'm telling you, it's tough when you are aging as rapidly as I am.

Senator THOMAS. Satellites work better.

[Laughter.]

Senator LINCOLN. But I do thank you, Mr. Chairman, for your leadership in allowing us to be here and allowing me to echo the comments of Senator Johnson, Senator Burns, Senator Hutchinson, Senator Thomas, and others who have taken a leadership role in seeing that rural satellite viewers are not left behind.

I do recognize I am the only Democrat in the room, so I want to assure you that there is a good Democratic support for this initiative. I worked hard on this issue during the end of the session last year, and I think we recognize that there were a lot of Democrats interested.

Mr. Chairman, it seems like it has all been said, but not everyone has said it. It is now my turn. I guess that's one of the privileges, which I quite enjoy, of being a new Member of the Senate. I always get to go last, so I actually have the last say. I will take just a few minutes. As I look around, I am delighted to see new faces who have recognized how important this issue is to all of us across this country. It's good to see they appreciate the importance of this issue to folks in Arkansas and the rest of rural America.

I wish we had all gathered together in November when I was circulating a letter in support of the rural loan provision. We might have avoided revisiting the issue today. But now that we are here, I appreciate your interest. I hope that through these hearings, and those we are holding in the Agriculture Committee, we can reach a consensus on how to ensure maximum coverage in rural areas.

I am probably the best example of the consumers out there. I live in the middle of nowhere. I have had to use both satellite and cable. It wasn't until about 6 months ago that I was actually able to get local stations. I live in the eastern part of Arkansas, next to the Mississippi River, and for quite some time all I was able to get was Tennessee news. These issues definitely hit home. I have to station myself so I can catch the Seattle news, the Atlanta news, and the Boston news on satellite, then hopefully I will be able to get the Arkansas news later in the afternoon or evening.

This is an issue that affects the daily lives and access to information of thousands of my constituents, and I include myself in that. Since January 1999, my office has received more letters and phone calls about satellite legislation than almost any other piece of legislation we have dealt with. More than 500,000 people in Arkansas were left without access to local TV programming when we adjourned in November without adopting the rural loan provision in the satellite bill.

Twenty percent of our viewers in Arkansas depend on satellite, which is 10 percent above the national average. A loan guarantee is important because current satellite capacity can provide local-into-local only in the 30 or so top markets. I am not telling you anything you don't already know. In my home State, our largest media market, Little Rock, is only number 57 in the country. Our other local stations are in even smaller markets. The people who live in these communities deserve access to the same local news, weather, and programming that folks in larger cities have.

As my colleague from Arkansas said, we are prone to tornados. Of course, they sometimes start in Texas or Oklahoma and pick up speed. By the time they reach us, they are real humdingers. We need to know about them when you send them our way.

There is widespread support in the Congress for this proposal. Last fall, when the Chairman expressed concern over the rural loan provision, a bipartisan group of 24 Senators joined me in signing a letter urging the Majority Leader to file cloture on and proceed to the satellite bill. After we delivered the letter, there were five additional Senators who called my office seeking to sign on at that point. Meanwhile, Senator Burns was circulating another letter among Republicans, clearly demonstrating bipartisan support for the rural loan provision.

Local broadcasters provide a valuable service to rural communities. They provide people with local news and vital details about storm warnings, school closings, all of what is going on in those local communities. People in rural communities need access to this information. It is vital to their quality of life. They deserve it. I certainly urge Congress and this Committee to do its part in seeing that we get it done. I know we can, and I pledge myself with you, Mr. Chairman, to work hard to make sure that it does get done.

Thank you very much for inviting me.

Chairman GRAMM. Thank you very much, Senator Lincoln.

I would like to ask unanimous consent that we invite all of the Members on this panel to come up and join us when we finish with this part of our hearing. We have Dan Crippen with us, who is Director of the CBO. He will be the next witness. Any of you who would like to participate in that discussion, we would very much like to have you.

Let me say that our commitment from last year was that we would report a bill by the end of March. I believe we are going to prove better than our word and report a bill by the end of this month. I hope we can move very quickly. I don't see this as a partisan issue. Even though Senator Burns is going to flatten his State out to make it as big as Texas, I have more people who face problems in getting local signals than any State in the Union, though on a per capita basis, I think at least two of the States represented here would exceed Texas. I am not sure about Arkansas; it would be close.

We all have a stake here. The question is: Can we do it right? Again, I don't see a conflict between writing a bill that protects the taxpayer and writing a bill that gets the job done, because the last thing on earth we want to do is end up with a bill where we spend the \$1.25 billion, we don't get the coverage, and we don't get the \$1.25 billion back.

One thing is certain. Anybody that gets this loan guarantee and repays the loan will have succeeded. It is success that we want.

Let me yield to Senator Enzi. I know he has been active in this. He may want to make a statement and ask some questions.

#### **OPENING COMMENTS OF SENATOR MICHAEL B. ENZI**

Senator ENZI. I will include some comments with my questions. I ask that my entire statement be made a part of the record.

Chairman GRAMM. Your statement will be made a part of the record as if read in its entirety.

Senator ENZI. I want to thank you for holding this series of very critical hearings. In Wyoming, there probably isn't anything that I get more correspondence on than this particular issue.

Now, I appreciate all of the effort that Senator Burns has gone to. I want to encourage him not to flatten Montana, although that would mean greater economic development for Wyoming because then, people would come to Wyoming to see the mountains. But I am envisioning him moving us a little further south, and unless Mexico would give on their border, Texas will be smaller.

[Laughter.]

Senator BURNS. I have to work my way through that one.

Senator ENZI. That is just a part of U.S. ingenuity, probably, and throughout the history of the United States, there has been a lot of American inventions that have moved from novelty to necessity. In each instance, usually the U.S. Government has helped rural areas to have equality of access to this new necessity. For instance, the U.S. Mail. We now assure that for 33 cents you can send a letter anywhere in the United States, no matter how rural or how far from the mainland. That is a Federal Government initiative. Later, electricity became a necessity, and the United States helped rural areas, again, to be sure that they had this new necessity.

More recently, phones have become a health and safety necessity, and several programs have been put into effect for rural areas. Today, television is seen as a necessity. People rely on TV not just for entertainment but, as you have said, for news and weather and special warnings of impending disasters. The more rural a person is, the more they need to have TV for critical information as well as for entertainment.

No one, hardly anyone, outside of this group or the people that provide television understand "must-carry" and the other lingo that we are using with this whole issue. What rural folks understand is that "must-carry" and the other special lingo keeps them from having television signals that they know are available in the air around them. We need to help everyone get this basic necessity.

I want to again particularly congratulate Senator Burns for the lead that he has taken through the Commerce Committee and for bringing this issue to us early last year. I also, of course, have to thank my colleague for his comments today and the interest and leadership that he has shown in this issue. And I would be very remiss if I didn't mention our lone Congresswoman from Wyoming, Barbara Cubin, who was one of the early leaders in getting a solution and one who sold a solution on the House side. She is watching with a great deal of interest what we do over here.

The emphasis that I am trying to place here is this rural one, and I am afraid that part of the message is getting lost in the city competition issue. I am pleased that each of you mentioned the rural aspect of this. I would be interested in comments on how much of a priority in your State the competition in cities of having more than one method of delivery and the networks would be as compared to the need for those rural folks to jump to the head of the list, perhaps, and be able to get access to what the folks in the cities already have in one way or another.

Senator LINCOLN. I would be glad to jump in. As I mentioned, Little Rock is our major city in Arkansas, number 57 in terms of the size of its media market. I don't believe we reach the estimates in terms of what the current satellites could serve. And even if we did, Little Rock would be the only market that would be serviced

through the current satellites. That is the reason it is so absolutely important for the entire rest of our State to be able to have access through the capability of getting those networks up on satellite and accessible to, as I said, 20 percent of our viewers, 500,000 people in Arkansas who depend on that.

I would echo what the Chairman said, that we want to see this as a successful piece of legislation, and I think the success depends on getting the biggest bang for our buck, and that means covering as many consumers as we possibly can with the funds that we are going to be using. In my opinion, the coverage for consumers is going to be one of the biggest measures of success in this. For us in rural States, where almost all of our State is predominantly affected, that is going to be the real key.

Senator THOMAS. Senator, I think certainly there are two aspects to this. One is to provide some competition for cable so that the prices do not continue to be unaffected. But the real emphasis at this point clearly is on the agricultural area, on the rural area, where people can get no service at all if they are not in the broadcast area. As you know, in our State, the emphasis is on the rural.

Senator ENZI. Since my time—

Chairman GRAMM. Let's have both Senator Hutchinson and Senator Burns respond.

Senator HUTCHINSON. I think that Senator Lincoln has it exactly right. In Arkansas, the magnitude of the problem in rural areas is such that any concern about undue competition is overwhelmed by the sense that we have to provide that service to the rural areas. I believe Senator Thomas is right as well, that competition is a healthy thing.

Senator BURNS. This Act, the Satellite Home Viewer Improvement Act, is the result of a lawsuit that was filed and tried to deal with this must-carry situation. The must-carry language in the Cable Act was crafted in my office during that debate. Although people want to see the network news in rural areas—the NBC's, the ABC's, the Fox's, all of these stations—they were watching Charlotte, North Carolina, New York, Los Angeles, San Francisco, Denver, or whatever, and it was really a slap in the face to the local broadcaster who had the same programming but couldn't get it to them. They had no reception in, let's say, the B contour. You have an A contour, the primary, then you have the B. That is what bothered me, and that is why we had to come up with an idea on how to service all of the markets, not just a few, on local-into-local. When we say local, that means local broadcaster to that B and C contour.

Perhaps I'm using some terms in there that you are not familiar with on the Banking Committee, but we're very familiar with them over on the Communications Committee. The emphasis is on rural. When the Chairman and I were talking about this, we asked how do we do that? Well, the RUS funds—and they came up during that conference—were our only vehicle.

Yes, it was flawed, the initial thrust was flawed a bit. We worked it out, and I think we have a better bill, thanks to the Chairman working with us. We appreciate your efforts on that.

Chairman GRAMM. Thank you, Senator Burns.

Senator Bunning.

**OPENING STATEMENT OF SENATOR JIM BUNNING**

Senator BUNNING. May I make an opening statement?

Chairman GRAMM. You certainly may.

Senator BUNNING. Thank you, Mr. Chairman, for holding this hearing. Of all the issues in the first half of the 106th Congress, I received more mail on satellite television, or the lack of it, and local stations being carried by satellite than on any other issue. In many parts of my State, like all of your States, it is virtually impossible to receive any broadcast. Cable companies do not cover most of the State. Many in my State are forced to use satellite reception for the news of the day, the weather, or whatever it might be, and none of it in Kentucky contains any Kentucky broadcasts. None. The only reason they pick up a satellite is to see University of Kentucky basketball games, because they are usually carried on national television.

It is very important that we hold this hearing to decide what is the best way to ensure that folks in the rural areas, not only in your States, but also in Kentucky, have the same access to the media in Lexington, Louisville, and any other stations that are home broadcast stations within the State.

In my area, I receive Cincinnati television. That is all. I don't get a Louisville or a Lexington station in northern Kentucky. I am able to see the weather and news, but no news of Kentucky. If I had satellite and I could pick up Louisville or Lexington, I would be able to know what is going on south of me.

I applaud my colleagues who have come before us today to share their ideas on how we best can make sure the citizens of our States and our country have access to local news, weather, and entertainment. I am also very interested in hearing your thoughts about the Federal loan guarantees that caused so much controversy at the end of the first session of this 106th Congress.

I would like to know what all of you think we should do. I know some of us support the bill as presented. Some of us may have other ideas on how we can guarantee those loans and make sure that they are paid back and they get the service we are looking for into our areas.

Should we limit participation? That is what the dish companies are doing. They are picking the 30 best or the most populous or the largest television stations and putting them on my dish whether I like it or not. I don't want to know what is going on in Seattle or New York. I want to know what is going on in Louisville or Lexington. They tell me there is a technical problem of putting enough local stations that carry local news on the dish. In this day and age, I think that's baloney. I think we can do it and do it well.

Obviously, we have a big job ahead of us in finding solutions to this problem that everyone can live with. But I am sure, as the Chairman has said, we will have a bill on the floor by the end of February or some time in early March.

I believe that all of your testimony has gone a long way toward helping us find an answer. I thank all of you for coming before us. I welcome you to move up here and join us in asking questions of Mr. Crippen, the Director of the CBO.

Thank you, Mr. Chairman.

Chairman GRAMM. Thank you.

Let me thank each of you for coming. Your testimony is greatly appreciated. Let me remind you, if you have time, we would be happy to have you come up and join us.

Let me call Dan Crippen, who is Director of the Congressional Budget Office. Mr. Crippen, I want to thank you for being here. Obviously, your input is very important, not only because you are a very distinguished economist, but also because of the content of the thought and because you will end up scoring our loan guarantee, and it will be triggered by an appropriation of that amount. Your input is very important to us.

As I mentioned earlier, our goal is to have a loan guarantee program that will in the process encourage private investment to deal with this problem. We are trying to structure it in such a way as to minimize the risk to the taxpayer, but in doing so maximize the chances that we will actually achieve our objective.

I think it is important to remember that only a successful loan guarantee where the loan is repaid is one that actually puts lead on the target by delivering the signal.

Nonetheless, your input is very important. We want to thank you for coming on fairly short notice and we apologize for holding you up an additional hour. Let me ask you to proceed.

**OPENING STATEMENT OF DAN L. CRIPPEN  
DIRECTOR, CONGRESSIONAL BUDGET OFFICE**

Mr. CRIPPEN. Thank you, Mr. Chairman. There is a tradition at the CBO that I didn't know about before I went. When I walked into the office, not only was the requisite Government-issue furniture there, of course, but when I opened the top drawer of my desk, I found a skunk. That apparently gets passed—

Chairman GRAMM. Was it dead or alive?

Mr. CRIPPEN. Well, it was dead at the time. It had been deodorized. While I got some of the meaning at the time, now—looking up at this panel and the previous one—I fully understand why the skunk gets passed on from one Director to another.

I am pleased to be with you this morning to discuss providing Federal loan guarantees to increase access to local television services in mostly rural markets that are unlikely to receive signals through existing DBS companies.

Federal assistance for this venture, we believe, Mr. Chairman, would be likely to prove costly. The market for delivering local television signals would be both subject to competition and relatively small, making it difficult to ensure that large investments could be recovered, especially in the near term. The cost to the taxpayers would depend on the size of the program and how much of the risk was borne ultimately by the Government.

The budgetary treatment of loan guarantee programs, as you know and have just cited, is governed by the Federal Credit Reform Act of 1990. That Act makes commitments of Federal loan guarantees contingent on the appropriation of enough funds to cover the estimated subsidy. Under credit reform, the subsidy cost of a loan guarantee is the estimated long-term cost to the taxpayers.

The subsidy cost of federally guaranteed loans typically depends on expected defaults as well as on any recoveries through collateral and income from fees or other charges.

In the CBO's view, providing local television service in rural areas is likely to prove financially and technically risky, with an attendant regulatory risk we have not assessed. For such services to be economically viable, millions of households would have to be willing to pay a premium to satellite or other service providers to receive local television stations—even though most households can view those stations at no additional charge through their over-the-air antenna or existing cable subscription. Thus, borrowers of the proposed guaranteed loans might have trouble achieving the necessary level of market penetration for a new television service.

In addition, unlike companies that provide rural electrification or telephone services, these borrowers would immediately confront competitors in the marketplace. They would also face numerous technical risks, including the risk that emerging technologies will allow local broadcast signals to be delivered to the home through much less costly methods.

As I mentioned, our analysis does not include any regulatory risk, such as the availability of spectrum and appropriate satellite slots, if that is the technology, or the ability of any new entrant to gain licenses for those resources.

Many options to provide Federal loan guarantees for rural television service are under consideration, but the CBO has estimated the cost of only one proposal thus far. Last fall, we estimated the subsidy cost of the loan guarantee program initially included in Title II of the conference report on H.R. 1554. We estimated that this program would have a subsidy rate of about 28 percent of the total amount guaranteed. For a \$1.25 billion loan guarantee program, which was included in that bill, that translates into an estimated subsidy cost of about \$350 million.

To reiterate, the cost of a loan program to the taxpayer is determined largely by the riskiness of the venture and how much of that risk the Government will bear. One way to reduce the cost of a loan guarantee program significantly is obviously to reduce its size, either by decreasing the total obligation level or by guaranteeing less than the full value of each loan.

About half of existing Federal loan programs guarantee less than 100 percent. Some guarantee as little as 50 percent. Guaranteeing less than the full value can reduce the cost to taxpayers in two ways: First, it obviously lowers the total dollar exposure; second, and more important, it can reduce the default risk by encouraging private lenders, who have more expertise in analyzing credit risk, to scrutinize their exposure more carefully.

Modifying the terms of the loan guarantees can also change the subsidy cost, but for the most part, such technical changes would have a relatively small effect on the cost of the proposed program. Other options to reduce subsidy costs include requiring borrowers to pay fees, protecting the Government's security in the event of default, and ensuring effective underwriting criteria.

It is possible to reduce the cost of proposals to guarantee loans for delivering additional television services, but it is not possible to eliminate all of the risk or the cost of making such guarantees. In theory, the purpose of the Federal loan guarantee is to provide credit for activities that the private marketplace considers too risky to pursue on its own. Such support comes at a cost.

The surest way to reduce the cost of proposals like the one included in H.R. 1554 would be to reduce the size of the Federal loan guarantee. Other modifications, such as charging fees or improving underwriting criteria, are unlikely to reduce the estimated subsidy appreciably because the activities being financed are fundamentally risky. Options designed to reduce the cost to the taxpayers could make the program less attractive to potential borrowers or lenders, which in turn could reduce the demand for the loan guarantees.

I will end my testimony at this point, Mr. Chairman, because I am sure there are questions.

Thank you very much.

Chairman GRAMM. Mr. Crippen, thank you for your primer on loan guarantees. I think that what you have said is clearly true. I would like to ask you four questions.

First of all, one of the concerns I have had is the concern you raised here that where we assure that if somebody is going to borrow money there is a loan guarantee—which, when converted into plain, simple English, means if they don't pay, the taxpayer pays—we should require them to put up capital. One of the things you always face with a loan guarantee is the potential that, for example, a group of television stations might get together and say, well, let's form this entity and apply for the loan guarantee. But that entity may have virtually no assets.

One of the things we are looking at is requiring that if there is an entity set up by a group of economic interests having assets, if that entity applies for a loan guarantee, we will require that those who own or are affiliated or associated with that shell company commit their own assets. Obviously, in the case of the television stations, the assets would be the stations themselves.

You could have a county or a State set up an entity, for example, the Utah Satellite Distribution Corporation, as a State entity with no assets. But if we required the State of Utah to commit its tax base as an asset, then obviously we have an asset.

I would like to get your response on the desirability of requiring real capital to be committed to this process.

Mr. CRIPPEN. Clearly, Mr. Chairman, under any loan scenario, private or public, the quality of the collateral is very important, not just the amount of the collateral. Secondarily—something we have not yet discussed—is the need to make certain that the Federal Government's lien is superior and not subordinate to private sector liens, so that any exposure that the taxpayers have would be met first. It is not just a matter of being first in line but a matter of making sure that the private entities involved are paying close attention to the risk they are exposed to.

Chairman GRAMM. That was the third question I was going to ask you. There has been some discussion of whether the Government would have prior claim. It seems to me that to do it any other way—given that no one is proposing that we guarantee less than 50 percent of the loan so that obviously the taxpayer is going to be more on the hook than anybody else—to suggest that we not give the taxpayer first claim if the entity that has borrowed the money defaults would be totally unacceptable. Is that your and the CBO's position?

Mr. CRIPPEN. Yes, sir. "Unacceptable" is not a word we would use, but it would certainly change the dynamic of the loan dramatically. If you let the private entities—whether they are paying 30, 40, or 50 percent—get first claim, then the taxpayers are certainly on the hook. There are a couple of expressions for that which we probably should not repeat here, but they should not be second in line. Certainly, the taxpayer should not be subordinate.

Chairman GRAMM. In terms of the percent of the loan guaranteed, obviously to the degree that the Federal Government doesn't guarantee 100 percent of the loan, that means that somebody has to convince a private lender that their project is credible enough they should actually have some exposure.

I take it from your opening statement that you believe it is absolutely essential that there be a private risk element in the loan and that we not have a 100 percent loan guarantee.

Mr. CRIPPEN. Certainly, Mr. Chairman, that is the most effective way to reduce the subsidy. If your goal is to try, as you and others have stated, to minimize or reduce the risk to the taxpayers, that is the most effective way to do it.

Chairman GRAMM. A final question. Senator Burns was talking about using the language of television distribution—and, Senator Burns, thanks to these hearings and to all of our meetings, I now know more about this subject than I want to know—and one of the things, it seems to me, that we want to keep a focus on in this Committee, because it is our responsibility, is that an advantage of requiring real capital, an advantage of requiring a private element in the loan by not guaranteeing 100 percent of the loan, an advantage of giving the taxpayer first claim forces those that are involved to exercise prudence and due diligence. If, in the end, they have nothing at stake, if only the taxpayer has something at stake, I think that breeds, whether people like to admit it or not, the willingness to take risks that people would not ordinarily take if they had assets of their own at stake. A lender making a loan where they have no risk is a very different lender than one making a loan who faces some risk.

I see doing the things you have outlined—requiring real capital, guaranteeing less than the face value of the loan, giving the Federal Government first claim—but I think there is an added benefit, and that is, it reinforces prudence and due diligence on the people that are borrowing the money and the people that are making the loan. Do you agree with that?

Mr. CRIPPEN. I do, and I would add that it is prudence and due diligence by people who are probably much better able to assess the quality of the loan or the venture itself than any of us.

Chairman GRAMM. Thank you, Mr. Crippen.

Senator Burns.

Senator BURNS. Thank you, Mr. Chairman.

Mr. Crippen, do you remember the details of the Chrysler guaranteed loan program when Chrysler was—

Mr. CRIPPEN. Probably not well enough to answer your question, but I will try.

Senator BURNS. I believe it would be unfair, but, actually, I like our approach, the way we are doing this right now. I also want to caution that when we start into a program like this, had we taken

this same attitude, we would not have electricity on a lot of our farms and ranches today. There is a certain amount of obligation that we have toward rural America that would make the risk a little more palatable to the taxpayer because we have an obligation to our rural areas that are very sparsely populated. In other words, in eastern Montana, we have a lot of dirt between light bulbs, and we wouldn't have electricity today had it not been for the REA.

As we move along, I appreciate your testimony this morning. I also appreciate your figures and your view of how we should structure this thing. I believe the Chairman has it just right. I like the idea of reinforcing prudence and due diligence and the responsibility that borrowers have to the taxpayer, to their own viewing audience, and also to their industry on how they approach this. I think that is what brings it all together. It may be the very thing that ties them together that will make it a success.

I thank you for your testimony this morning. That is all I have to say. I appreciate your good help.

Chairman GRAMM. Thank you.

Senator ENZI.

Senator ENZI. Thank you, Mr. Chairman.

In your testimony today and in a letter that I saw you had sent, you estimated that there would be, it looks like two different numbers, a \$300 million cost or \$350 million cost on the loan. Can you give me a little more information on how much of that is up front? Is that spread? Is that an annual cost? What factors are involved in that?

Mr. CRIPPEN. The way the credit reform requirements are now, since 1990, the total exposure for the taxpayer is to be estimated up front as a net present value over the life of the loan. According to the Credit Reform Act, at least, the \$300-plus million would have to be appropriated in the first year. It is not an annual cost; it is the total expected cost of the credit.

The main factors, obviously, are how much of the loan is guaranteed by the Federal Government and what the risk of any default might be.

Senator ENZI. What assumptions were made when coming up with the \$350 million cost?

Mr. CRIPPEN. The primary one, of course, is that the legislation specifies \$1.25 billion of loan guarantees and covers 100 percent of the loans. Also, the default risk is relatively high, as I stated, because of the technical and financial risk involved.

Senator ENZI. What would you consider to be the most significant risk in this?

Mr. CRIPPEN. I don't know that I can say which is most significant. There is certainly a financial risk in the loan itself. But more important, is the business a going concern? Can it get enough subscribers? There is a technical risk not only in delivering service with current technology, but also in what new technology might do. And there is a regulatory risk in whether or not we have slots and spectrum and other things that would be needed to implement these systems.

Senator ENZI. Do you have any specific suggestions on how to set up the selection process in ways to minimize the risk through that selection?

Mr. CRIPPEN. I think the Chairman was talking about how one can set up the loan program. That is probably the best thing to focus on, as opposed to trying to regulate the characteristics or criteria of applicants. It is the nature of the program that will bring serious folks to the table. If they put up real assets, that will help to mitigate the risk the taxpayers face.

Senator ENZI. Thank you.

Thank you, Mr. Chairman.

Chairman GRAMM. Senator Bunning.

Senator BUNNING. Thank you.

Is the risk dependent on the inability to have one specific entity responsible for the loan? Maybe you can clarify that for me.

Mr. CRIPPEN. No, it is not. In fact, the legislation we scored made provision for half of the loan going to one entity, but having other entities eligible as well.

The one primary issue that drives our estimate is the economics. Currently, cable passes about 97 percent of all television households, so there is a 3 percent market, if you will, as an upper bound of people who can't or don't receive local television. I say upper bound because some of those 3 percent are receiving it through other, noncable means and over the air. There is a very small number of households who currently can't receive local television via another means.

That means there is instant competition in most of the country. Ninety-seven percent of the country has another source, in cable, so the competition that would be instantly on the ground in most places would mean there wouldn't be the ability to have monopoly pricing or even relatively high pricing. But it also means there is a very small market, and with many of these ventures, the fixed capital costs are high and the variable cost is very low, so it is a matter of volume and number of subscribers that help make the venture economically viable.

Thus, it is the current economics of television in this country that drives these estimates more so than any individual loan or technology.

Senator BUNNING. The fact of the matter that we hear from so many of these people is because they are, in fact, shut out of television completely.

Mr. CRIPPEN. Senator, I am obviously not privy to any of your correspondence. Most of the letters I have seen on this subject are complaining because people have been cut off from network programming, and that is because the local broadcasters can—

Senator BUNNING. They get something that is carried on a DSH like cable. But they don't get ABC, CBS, NBC, and Fox.

Mr. CRIPPEN. Right. And they don't get that even on their DSS because the local broadcasters have disallowed the waiver. That is what many of the complaints that I have seen and talked to people about focus on—that they are not getting network broadcasting as opposed to local broadcasting.

Senator BUNNING. I am sure that DSH and DIRECTV, if they had a minimal fee for the must-carry provision and carried something in Kentucky or, for that matter, in Wyoming or wherever, would get enough subscribers to pay down the loan over a 25-year

period. Are you telling me that is the risk we are taking because technology might overtake the ability to get that in another way?

Mr. CRIPPEN. Yes, as well as the fact that there is such a small market in which to gain any market share for this new service, there are a limited number of subscribers, and technology may well overcome this need very soon. Thus, there is a technical risk in addition to the basic financial risk, which is the primary one.

Senator BUNNING. I know the CBO doesn't issue opinions on this, but we have to deal with it on a daily basis, that the viability of delivering services where nobody else will go is the main cause of this thing that we passed last year. For example, rural electrification and other things that were considered weren't considered essential at the time, but are considered very essential now.

How much is that worth in this equation? We have to weigh that.

Mr. CRIPPEN. We are not here to say it is worth it or not worth it. That is not up to us. All we are saying is that the current technology and private sector are unable or unwilling to take the risk to do this. Obviously, the intent of this legislation is to provide some impetus to do it where it is not going to be done otherwise. That impetus, in our view, will expose the taxpayers to some risk. It is our duty to tell you what we think that number might be, but not to say the legislation is right or wrong.

Senator BUNNING. You are telling us it is a high risk.

Mr. CRIPPEN. It is a relatively high risk.

Senator BUNNING. What if we were to go ahead with the guaranteed loan program, but instead of guaranteeing 100 percent of the loan, we were to guarantee 50 percent?

Mr. CRIPPEN. Well, the more you reduce the coverage, the lower the risk.

Senator BUNNING. Thank you very much.

Chairman GRAMM. Senator Allard.

#### **OPENING COMMENTS OF SENATOR WAYNE ALLARD**

Senator ALLARD. Thank you, Mr. Chairman.

The thing that bothers me is if a company can't afford to provide the loan, how are they going to be able to afford to pay down the loan? Do you have a response to that?

Mr. CRIPPEN. The notion is that the loan guarantee would allow a lower rate of interest and presumably reduce the overall cost of financing to tip it over onto the side of the ledger where it is now viable. It is certainly not—

Senator ALLARD. We create an interest subsidy, in fact.

Mr. CRIPPEN. Yes.

Senator ALLARD. Do you have any idea how many people might benefit from this?

Mr. CRIPPEN. Of course, you have to define benefit and all of that, but just looking at the raw data, 97 percent of the households who have televisions in the country are passed now by cable, and cable must carry local channels as well as network broadcasting, so 97 percent of television households have the ability now to get network and local programming through their cable. Of those, approximately 67 percent are currently taking advantage of that. But the point is, if those people wanted to get local and network programming now, there is at least one alternative.

Part of the objective, as others said this morning, is to introduce more competition into some of those areas. But in terms of people who don't now receive coverage, we believe the maximum would be about 3 percent of households. We believe that is a maximum because they may be getting over-the-air signals, they may be getting signals through microwave systems, or they may be getting signals elsewhere.

Therefore, the maximum number of folks who can't receive local broadcasts and network signals is about 3 million households.

Senator ALLARD. I apologize for being late, and you may have answered this question, but how much do you anticipate this would cost the taxpayers?

Mr. CRIPPEN. A little over \$300 million is our number. This is a unique program. Many of the things we score under credit reform have thousands if not hundreds of thousands of loans, so it's much easier to think about in terms of a risk pool and all of those things. But this is one event, and while the legislation makes loans available to several entities, it is still a single occurrence. You might envision a world in which borrowers pay the loans back, as the Chairman said, and if it is successful, there would be little cost to the taxpayer. On the other hand, if they default, there would be a big cost.

Thus, what we are forced to do, and what the law requires, is to make an assessment of what the factors are and say this is ultimately the value or the risk to the taxpayer of this particular loan.

Senator ALLARD. What is the feasibility of putting maybe a \$1 fee on each person that would benefit? If you did that, you would pay for the program.

Mr. CRIPPEN. It would take \$350 million, and there are only a few million people, in theory, who would want this service.

Senator ALLARD. But you said it could be up to 3 million.

Mr. CRIPPEN. It could be. That would be \$100 per person.

Senator ALLARD. To me, \$2 or \$3 doesn't seem like an excessive amount if it is a one-time deal, and that is what we are talking about here, basically, aren't we?

Mr. CRIPPEN. No, it would be closer to \$100 per person for all 3 million people.

Senator ALLARD. Now, there are some bleak aspects to what we are talking about here. How realistic do you think it is to expect private sources to pick up these loans without a full 100 percent guarantee?

Mr. CRIPPEN. I don't know, Senator. In looking at other Federal programs, the guarantees run from 100 percent all the way down to 50 percent, and even at the 50 percent level there are still some willing takers. It will obviously depend on the individual credit involved, whether the bankers or the other private financiers believe it is a viable, going concern that they are dealing with. It depends a lot on the specifics of the individual deal and on how much the private sector would be willing to take as risk.

At this point, it looks like they aren't willing to take the risk standing alone and without this program. That is obviously the reason for your legislation.

Senator ALLARD. But can you see where we could make this attractive to the individual investors with a partial guarantee at some point there?

Mr. CRIPPEN. Sure.

Senator ALLARD. Do you have any idea where that threshold might be?

Mr. CRIPPEN. I don't. Again, it would depend on the specifics of the deal and on the kind of technology involved. There are things like regulatory risk that we haven't taken into account here. Let's say there was a large corporation willing to do it. Then it would be easier, I am sure, to get private funding. If it is an unknown new entity, it is going to be much harder. It depends on a lot of those characteristics.

Senator ALLARD. Mr. Chairman, I believe he brings up a good point on regulatory risk. We do have some provisions in our banking laws where we require banks to invest in their communities, and I am wondering if somehow the other credit couldn't be applied to this as an investment into rural communities. We might give that some thought.

I would also ask unanimous consent that my prepared remarks be made a part of the record.

Chairman GRAMM. They will be made a part of the record.

Before we conclude, I want to go back and touch very briefly on a few things, Mr. Crippen. The more capital we require to be put up, the less the cost is going to be, other things being the same.

Mr. CRIPPEN. Yes.

Chairman GRAMM. The more we require private lenders that are participating to share with the Government some of the risk, the lower the cost is going to be to the taxpayer.

Mr. CRIPPEN. Correct.

Chairman GRAMM. The stronger the claim we give the taxpayer to claim assets if borrowers default, the lower the cost will be to the taxpayer.

Mr. CRIPPEN. Mr. Chairman, if the Federal taxpayers were made subordinate, it might raise the cost to the taxpayer dramatically as opposed to slightly.

Chairman GRAMM. Well, again, it seems to me that what we are trying to do here is not wish away a problem. Obviously, there is both a technical challenge and an economic challenge in what we are trying to do. It seems to me that a well-crafted loan guarantee basically says that we are willing to incur some risk to try to encourage this to happen. But if you underwrote 100 percent of the loan and you set no capital standards, you know the loan will be made, but you have no guarantee whatsoever that any service will ever be provided.

It seems to me that if you set out a prudent policy, you enhance the chances that, in fact, you will get coverage to the people who are going to be paying for that coverage, and in the process make it possible to repay the loan.

Again, I get back to my point. A fiscally responsible program not only minimizes the risk to the taxpayer, but also maximizes the chance that in San Geronimo we are going to get access to the local programming. Do you agree with that?

Mr. CRIPPEN. Certainly, the less exposure the taxpayer has, the more likely the success of the loan. That is exactly what you are saying.

Chairman GRAMM. Mr. Crippen, we can't ask you and I certainly am not asking you to wish away the problem. This is obviously a difficult problem. We hope to put together a bill that is going to have less exposure to the taxpayer than we had before. Obviously, we hope that the projected cost, which we have to appropriate up front, will be less than \$350 million. All we can do is keep in mind what you have said, write the bill to the best of our ability, and have you score it. We will see how the process goes and whether or not we actually achieve the goal.

No one could ask for clearer testimony than that which you have provided today, and I want to thank you on behalf of the Banking Committee.

Mr. CRIPPEN. Thank you.

Chairman GRAMM. Thank you very much.

We stand adjourned.

[Whereupon, at 12:10 p.m., Wednesday, February 9, 2000, the hearing was adjourned.]

[Prepared statements supplied for the record follow:]

**PREPARED STATEMENT OF SENATOR MICHAEL B. ENZI**

Thank you, Mr. Chairman, for holding this second hearing on loan guarantees to provide local television service in rural areas. Throughout the history of the United States we have seen several American inventions move from novelty to necessity. In each instance the U.S. Government has helped rural areas to have equality of access to necessity.

First was the U.S. Mail—we even assure that 33 cents will deliver a letter to anywhere in the United States, no matter how rural or distant from the mainland.

Then electricity became a basic necessity. The Rural Electric Associations were encouraged to fill a rural need.

Phones more recently have become a health and safety necessity. Several programs for rural phone service have made phones available to almost everyone.

Today, television is seen as a necessity. People rely on TV not just for entertainment, but for news and weather and special warnings of impending disasters. The more rural a person is, the more they need to have TV for critical information as well as for entertainment.

No one, especially rural folks, understand “must-carry” or any of the other special lingo that is used to keep them from having television signals that they know are in the air around them. We need to help everyone have this basic necessity.

At the last hearing we heard from the parties that are interested in participating in the program this Committee creates. Now we get to hear from our colleagues who were working to include a loan guarantee in the Satellite Home Viewer Improvement Act of 1999. I would like to especially thank Senator Burns of Montana for bringing to the Senate’s attention the situation faced by rural satellite viewers and I look forward to working with him to develop a solution that truly benefits rural America. Senator Burns has provided excellent leadership on this issue for several years. I am interested in hearing from our colleagues on this panel their ideas and suggestions for how we can craft a program that protects the taxpayer and brings local television stations to rural areas as quickly as possible.

I would also note and thank my colleague from Wyoming for his interest in our bill. I also want to mention and congratulate the Congresswoman from Wyoming, Barbara Cubin, for her dedication to this issue, her early work on solutions, and her ability to sell it on the House side.

During the last hearing we learned that the satellite programming companies, EchoStar and DIRECTV, are quickly rolling out local-into-local service in the top 30 markets but have no plans to serve rural markets without some sort of Government incentive or mandate. As we have seen in other industries, regulations and mandates often block innovative solutions to longstanding problems. I believe that any plan this Committee develops must be targeted to bring local television stations to unserved households in Glendive, Montana, and Cody, Wyoming, not just the top 100 or 150 markets. We should be looking to serve the unserved first—maybe providing an incentive for programming companies to actively work to close the gap—from the smallest to the largest media markets. I also believe we should take into account the size and resources of the applicants and consider limiting the program to companies focusing their operations in rural areas. We must also ensure once the satellite is in orbit and providing service to rural America that it not end up serving urban areas due to economic excuses made by the operator.

I have thousands of letters from constituents who live in the most remote areas of my State and who use a satellite system to stay connected to the world. One of the most poignant letters I received was from a constituent who lives in a rural area near Worland, Wyoming. Worland is a particularly isolated spot in my State, and this constituent uses a satellite dish to receive network programming. She would like to be able to watch Wyoming stations for her news and weather, but because of distance and geography is unable to do so. I would like to read some excerpts from her letter expressing her frustration at not being able to access Wyoming network stations. She writes:

We have no local television station, only one local mediocre radio station, and cable TV is not even considering coming this far out in the country. Wyoming, as you are only too well aware, is isolated in its own right. We have no such thing as ‘next-day’ delivery of mail or Federal Express or Airborne deliveries. . . . For us ‘out in the boonies’ the satellite system was our only link to the Nation’s news, entertainment, and culture. It provided us a link to the rest of our Nation and the world.

She goes on to convey her displeasure at her inability to receive the same types of satellite programming access that the urban areas receive. I believe people such as this constituent should be the first to benefit from the loan guarantee program we develop in this Committee.

**PREPARED STATEMENT OF SENATOR WAYNE ALLARD**

I would like to thank the Chairman for holding the second hearing in our series of hearings to examine the issue of loan guarantees for rural broadcasting more closely. Although it was unfortunate that the weather forced us to delay this hearing initially, I am pleased to see that this new date has afforded the Committee the opportunity to hear from several additional Members.

I'm sure that my colleagues have received a significant response from their constituents on this issue, just as I have. We all have constituents who are concerned about being able to receive their local stations, and I appreciate the opportunity to learn more about the issue.

As a Member of the Banking Committee, I'm hopeful that we can find a way to balance the concerns of rural constituents who wish to receive their local broadcast stations with the concerns that taxpayer money should be protected. I believe it is possible to formulate a loan guarantee program that will take both viewpoints into account.

I welcome my colleagues to the Banking Committee, and I look forward to their testimony.

Thank you very much, Mr. Chairman.

**PREPARED STATEMENT OF CONRAD BURNS**

A U.S. SENATOR FROM THE STATE OF MONTANA

FEBRUARY 9, 2000

To begin with, I would like to thank Chairman Gramm for holding today's hearing. The fact that this hearing is being held so early in the session is a clear indication of just how serious this issue is to both the Chairman and the entire Senate. I would also like to thank the Chairman for the open and cooperative approach he has taken with me on this issue.

I am very pleased to report that the Chairman and I have come to an agreement in principle on a bill that would provide local television signals to rural America in a fiscally responsible way. I am confident that the "Burns-Gramm" bill will meet this important goal. The Chairman and I plan to introduce the bill as soon as possible after today's hearing, taking into account the expert testimony we will hear from Dan Crippen, the Director of the Congressional Budget Office.

Providing access to local television signals is crucial to rural States. With over-the-air broadcast signals and cable delivery limited by the geography of my own State of Montana, satellite television has been a staple of our so-called "video marketplace" for many years. In fact, Montana has the highest penetration level of satellite television in the country at over 35 percent.

I initially proposed the rural viewer amendment because I was concerned that without it, only the largest television markets in America would receive local-into-local service authorized by the Satellite Home Viewer Improvement Act. These are the very profitable cities like New York and Los Angeles with millions of television households. Even the most optimistic local-into-local plans will require 2-3 years to employ, and then to only about 70 of the 210 TV markets in the United States.

What about the 140 other TV markets? There are 16 States—including my own—that do not have a single city among the top 70 markets. They should not be left out of the information age just because they are smaller. These 140 markets that would be left out are more than just remote, unpopulated areas. They include half of the Nation's State capitals and a dozen cities with nearly 500,000 people each.

The rural viewer amendment was designed to spur technologies that would bring news and information to consumers who because of distance or geography are not able to get local TV signals. It could be the launch of satellites to serve these 140 "unserved markets" or it could be terrestrial technologies that deliver these signals.

The ability to receive local television signals is more than just having access to local sports or entertainment programming. It is a critical and immediate way to receive important local news, weather, and community information. Access to local signals is particularly critical in Montana, where we experienced severe flooding last fall and sudden blizzards are always a possibility.

During the conference on the Satellite Home Viewer Improvement Act last fall, I became very concerned that the bill being considered did not address the needs of rural viewers. Several of the conferees shared my concerns and eventually agreed to accept the rural viewer amendment I offered into the conference report, which was approved by the House 411-8. The language that was eventually accepted by the conferees went through literally scores of different versions over several weeks

to make sure it was fiscally sound and administered properly. It would have created a Federal loan guarantee program to make sure that all Americans had access to local television signals.

While he agreed with the goal of the amendment, Chairman Gramm expressed strong objections to its inclusion in the conference report. Eventually an agreement was reached that the rural viewer amendment would be taken out of the conference report and given fast-track consideration before the Senate Banking Committee. The Chairman showed his good faith by committing to report legislation to the Senate for floor consideration by March 30, 2000.

Chairman Gramm and I are in absolute agreement that the loan guarantee program must meet two critical conditions—the program should not favor one technology over another and it should not pose a burden to the taxpayer. I am confident that these hearings will serve as a constructive base to make sure that the Senate is able to vote out the best bill possible on this issue.

As I have emphasized to the Chairman during our discussions on how to draft the bill, I have no pride of authorship about the language I submitted to the SHVIA conferees. While I am confident that the rural viewer amendment was the best solution we could have come up with in the final weeks of session, I know it can be improved—and improved significantly. I am not concerned with how this problem is solved but only that it is solved in the most effective way possible, both for consumers and for taxpayers. The Chairman has a wealth of expertise in the financial arena and I welcome his contributions on this issue.

Again, I thank the Chairman for the opportunity to testify today. I look forward to continuing to work with him and other interested Members in a bipartisan way to solve this critical problem for America's rural television viewers.

Thank you very much, Mr. Chairman.

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**PREPARED STATEMENT OF TIM HUTCHINSON**

A U.S. SENATOR FROM THE STATE OF ARKANSAS

FEBRUARY 9, 2000

Mr. Chairman, Members of the Committee, thank you for allowing me to speak on behalf of my constituents who will benefit from satellite companies being allowed to provide local programming, and a Federal loan guarantee program that will assist the industry in reaching that goal.

Arkansas is a rural State. The rugged terrain of the Ozark and Ouachita Mountains means that many Arkansans are so far removed from over-the-air signal and cable providers, they must rely on satellite service as their sole source of television programming.

I have heard from hundreds of Arkansans who are concerned about their network programming and want local television signals through their satellite providers. This is why I am here today. I want to join with my colleagues from rural States in support of a Federal loan guarantee program whose goal is providing unserved Americans with local television programming.

I supported the Satellite Home Viewer Improvement Act (SHVIA) because it ensured that our constituents in unserved areas would keep their network satellite programming and will be able to enjoy local programming someday. The challenges created by requiring satellite companies to provide local-into-local service is another reason why I am here today.

In order to reach our goal, I believe that satellite technology is an efficient way to deliver that local programming; however, that is not to say that cable companies and cooperatives may not be the best medium in certain areas.

We know that the technology and infrastructure needed to provide rural, unserved Americans with local television signals is both underdeveloped and expensive. A loan guarantee program will assist companies in complying with must-carry rules and expedite the proliferation of technology needed to provide local programming to rural customers in States like Arkansas.

Rural communities in my State are very close-knit, and local news and weather are important to the families living there. Some people may think we are going to a lot of trouble to make sure our rural, unserved constituents have access to local programming. While it is nice that all Arkansans would be able to watch our beloved Razorbacks, there are much more important reasons why we must continue our efforts.

One of the benefits of providing local channels is the ability to inform Arkansans of dangerous weather. Tornados damage property and take lives every year in my

State. The ability to respond quickly to sudden changes in the weather may mean the difference between life and death.

Another reason I am here testifying today is because I want my constituents to have access to the best technology available, no matter where they choose to live. It is clear that many rural communities in my home State are not served because providing them with reliable programming is not "cost effective."

Can we put a price tag on the opportunities communities are given when they have technology available to them? Personally, I believe we have the resources to allow Americans who are living in rural areas to benefit from the technology revolution. Americans in rural areas should not be left out.

There is no doubt that reaching the goal of providing rural customers with local programming is going to take cooperation. It is my hope that the technologies best suited to provide the local signals to our constituents will be given the opportunity to do so.

Mr. Chairman, I appreciate your commitment to writing a loan guarantee program that maximizes the probability that the loans will be paid back, as well as your determination to move legislation prior to the March 30 deadline.

I commend the work you and the other Members of the Senate Banking Committee are doing to ensure that my rural, unserved constituents have access to local programming. Again, thank you for allowing me to speak on behalf of thousands of Arkansans who will benefit from the work being done here.

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**PREPARED STATEMENT OF CRAIG THOMAS**

A U.S. SENATOR FROM THE STATE OF WYOMING

FEBRUARY 9, 2000

I appreciate this opportunity to lend my support for the rural loan guarantee provision to bring local television service to small markets. This proposal will bring hope to over 50 million homes in 170 television markets that otherwise would not receive local signals via satellite.

I want to commend Senator Burns for his work on this provision. Like the State of Wyoming, Montana has many small, rural television markets that will not get any local signals via satellite without the rural provision. I also want to thank Chairman Gramm for his commitment to work on this issue and to craft a fiscally responsible plan that will ensure that all consumers—especially those in medium and small markets—have access to local broadcast signals via satellite. Last year, I worked with Senator Burns on a letter that attracted a broad base of support from our colleagues for this type of proposal. I know this sentiment is shared on both sides of the aisle.

Without this plan, only the very largest television markets in America will receive local-into-local service authorized by this legislation. These are the profitable cities such as New York and Los Angeles. Under the best-case scenario, only 40 of the 210 television markets will have local service via satellite. None of these markets are in my State of Wyoming.

Unfortunately, because of distance or geography, not everyone can get a local TV signal, even with a rooftop antenna. The rural provision in this legislation will spur technologies that will bring news and information via satellite to consumers who cannot get a decent over-the-air signal.

We have very harsh weather in Wyoming and we rely on local channels as an important way to receive important local news, storm information, road reports, and school closings.

Some have raised concerns about the potential costs of this provision to the American taxpayer. I will put my record as a fiscal conservative up against anyone in the Senate. I am not going to support any program that will jeopardize the Treasury or the American taxpayer. I am confident that protections can be written into this proposal that will ensure that taxpayers will not be left holding the bag.

I also believe the USDA's Rural Utilities Service has the expertise to administer this loan guarantee program. I am not aware of any Federal agency that has the expertise and loan experience to bring vital telecommunications services to rural America as does the Rural Utilities Service.

I appreciate the opportunity to be here today and look forward to working with Members of the Committee to craft legislation that will ensure constituents in rural America are not left out.

**PREPARED STATEMENT OF BLANCHE LINCOLN**

A U.S. SENATOR FROM THE STATE OF ARKANSAS

FEBRUARY 9, 2000

Thank you, Mr. Chairman and Members of the Committee, for allowing me to echo the comments of Senator Johnson and others who have taken a leadership role in seeing that rural satellite viewers are not left behind.

Mr. Chairman, it seems like it has all been said, but not everyone has said it. I guess that's one of the privileges of being a new Senator in the Minority Party. I get to go last. I will take just a few moments. As I look around the witness table, I see some new faces and I'm glad my colleagues appreciate how important this issue is to folks in rural Arkansas and rural America.

I wish we had all gathered together to get this done last fall, when I was circulating letters in support of the rural loan provision. We may have been able to avoid revisiting this issue today.

But, here we are and it's important that we take this opportunity to act. I hope that through these hearings, and those we're holding in the Agriculture Committee, we can reach a consensus on how to ensure maximum coverage in rural areas.

This issue affects the daily lives and access to information of thousands of my constituents. Since January 1999, my office has received more letters and phone calls about satellite legislation than almost any other issue. More than 500,000 people in Arkansas were left without access to local TV programming when we adjourned in November without adopting the rural loan provision in the satellite bill.

A loan guarantee is important because current satellite capacity can provide local-into-local into only the 30 or so top markets. In my home State, our largest media market, Little Rock, is only number 57 in the country. Our other local stations are in even smaller markets. The people who live in these communities deserve access to the same local news, weather, and programming that folks in larger cities have.

There is widespread support in the Congress for this proposal. Last fall, when the Chairman expressed concern over the rural loan provision, a bipartisan group of 24 Senators joined me in signing a letter urging the Majority Leader to file cloture on and proceed to the satellite bill. After we delivered the letter, five additional Senators called my office seeking to sign it. Meanwhile, Senator Burns was circulating another letter among Republicans, clearly demonstrating bipartisan support for the rural loan provision.

Local broadcasters provide a valuable service to rural communities. They provide people with local news and vital details about storm warnings and school closings. People in rural communities need access to this information. They deserve it. I urge Congress to do its part and see that they get it.

Thank you.

**PREPARED STATEMENT OF DAN L. CRIPPEN**

DIRECTOR, CONGRESSIONAL BUDGET OFFICE

FEBRUARY 9, 2000

Mr. Chairman, Members of the Committee, I am pleased to be here this morning to discuss providing Federal loan guarantees to increase access to local television services. The proposed loan guarantee program is designed to encourage investment in systems that deliver local television signals to mostly rural markets that are unlikely to receive those signals through existing direct broadcast satellite (DBS) companies. In my statement today, I will provide an overview of some of the factors that affect the budgetary cost of such loan guarantees. I will also discuss options that might reduce the cost of the proposed program to the Federal Government.

Federal assistance for this venture would be likely to prove costly. Most of the proposals envision large capital investments. But the market for delivering local television signals would be both subject to competition and relatively small, making it difficult to ensure that large investments could be recovered, especially in the near term. Federal credit programs can shift—but not eliminate—the risk of such projects. The cost to the Federal Government would depend largely on the size of the program and how much of the risk was borne by the Government.

**Factors That Affect the Budgetary Cost of Loan Guarantees**

Many options to provide Federal loan guarantees for rural television service are under consideration, but the Congressional Budget Office (CBO) has estimated the cost of only one proposal. Last fall, at the request of Congressman Bob Goodlatte, the CBO estimated the subsidy cost of the loan guarantee program initially included

in Title II of the conference report for the Intellectual Property and Communications Omnibus Reform Act of 1999 (H.R. 1554). My testimony this morning is based on our analysis of that program.

H.R. 1554 envisioned a \$1.25 billion loan guarantee program. Up to half of that amount could be awarded to a single borrower, with the remainder divided among several smaller borrowers (each receiving no more than \$100 million). The loans would be used to finance the infrastructure needed to deliver local television broadcast signals—whether through satellite facilities, cable systems, or other wired or wireless systems. Although the legislation was written to cover a variety of possible technologies, key supporters argued that the program should be used to finance satellite transmission of local television signals.

The budgetary treatment of loan guarantee programs is governed by the Federal Credit Reform Act of 1990 (as amended). That Act makes commitments of Federal loan guarantees contingent on the appropriation of enough funds to cover the estimated subsidy associated with the guarantees. Under credit reform, the subsidy cost of a loan guarantee is the estimated long-term cost to the Government, calculated on a net present-value basis. Budget authority for the subsidy is recorded in the year it is provided; outlays are shown in the year in which the guaranteed loans are disbursed.

The subsidy cost of federally guaranteed loans typically depends on the extent of any defaults and the degree to which those losses are offset by proceeds from liquidating collateral and by income from fees or other charges. (Some loan guarantees also provide an explicit interest rate subsidy, which adds to the cost.) The credit risk of existing loan guarantee programs varies widely. Some programs have average default rates of less than 2 percent; others, between 10 percent and more than 20 percent, net of recoveries. Most existing programs guarantee a high volume of loans each year, effectively pooling the credit risk of many individual borrowers. In addition, fees—particularly up-front fees—offset some of the subsidy cost of most loan guarantee programs.

In the CBO's view, providing local television service in rural areas is likely to prove financially and technically risky. For such services to be economically viable, millions of households would have to be willing to pay a premium to satellite or other service providers to receive local television stations—even though most households can view those stations at no additional charge through their over-the-air antenna or existing cable subscription. Thus, borrowers of the proposed guaranteed loans might have trouble achieving the necessary level of market penetration for a new television service. In addition, unlike companies that provide rural electrification or telephone services, those borrowers would immediately confront competitors in the marketplace. They would also face numerous technical risks, including the risk that emerging technologies will allow local broadcast signals to be delivered to the home through less costly methods.

To estimate the subsidy cost of the loan guarantee program for rural television service, the CBO consulted industry experts and investment analysts and examined the credit ratings of firms in the satellite television industry. That information is useful in estimating subsidy rates because the different credit ratings reflect analysts' expectations of defaults. For example, a 1999 report by Standard & Poor's indicated that the cumulative default rate for investments with a "BBB" rating is less than 8 percent; for those with a single "B" rating, the default rate is 32 percent; and for those with a "CCC" rating, the rate is 45 percent. Based on our review of publicly available information about the ratings of companies in similar industries, we anticipate that the credit rating for rural television projects would be at the riskier end of that range.

We also examined the legislative terms and conditions that might mitigate such risk. For example, the loan guarantee program in H.R. 1554 would give the Government a superior lien on the assets of a borrower in the event of default, but it would let the Administration decide how much collateral to require. Likewise, judgments about the reasonableness of borrowers' business plans and the total amount of the loan guarantees would be made by the Secretary of Agriculture. Finally, H.R. 1554 would authorize the Secretary to levy fees and accept a payment from a non-Federal source to fund all or part of the credit-risk premiums.

The CBO estimated that the loan guarantee program authorized by Title II of the conference report for H.R. 1554 would have a subsidy rate of about 28 percent of the total amount guaranteed. For a \$1.25 billion loan guarantee program, that translates into an estimated subsidy cost of about \$350 million (assuming that the optional fees would not be charged or collected). Because H.R. 1554 would make implementation of the program contingent on future appropriation action, those costs would be discretionary. (A copy of our letter sent to Congressman Goodlatte about H.R. 1554 is attached.)

### **Options to Reduce the Cost of Loan Guarantee Programs**

As I noted earlier, the cost of a loan program is determined largely by the riskiness of the venture and how much of that risk the Government will bear. One way to reduce the cost of a loan guarantee program significantly is to reduce its size—either by decreasing the total obligation level or by guaranteeing less than the full value of each loan. Modifying the terms of the loan guarantees can also change the subsidy cost, but for the most part, such technical changes would have a relatively small effect on the cost of the proposed program. Other options to reduce subsidy costs include requiring borrowers to pay fees, protecting the Government's security in the event of default, and ensuring effective underwriting criteria.

#### *Reduce the Obligation Level*

The most simple way to decrease the size of the program is to reduce the amount of loans that the Government is offering to guarantee. H.R. 1554 would authorize guarantees totaling \$1.25 billion. Lowering the amount of obligations would cause a proportional reduction in the Government's exposure and thus in the subsidy cost.

#### *Guarantee Less Than the Full Value of the Loan*

Another way to reduce the potential cost to taxpayers is for the Government to guarantee less than 100 percent of the value of each loan. About half of existing Federal loan guarantee programs guarantee less than 100 percent of insured loans; some guarantee as little as 50 percent of the value of their loans. Examples at the lower end of the range are the Development Credit Authority program at the Agency for International Development (AID) and the Section 7(a) General Business Guaranty program at the Small Business Administration (SBA).

Guaranteeing less than the full value can reduce the cost to the Government in two ways. First, it can lessen the Government's direct exposure for each loan by lowering the dollar amount of the guarantee. Although that would reduce the cost of the proposed program, it would run the risk that private lenders might be unwilling to lend enough funds to meet borrowers' needs. Second, it can reduce the default risk by encouraging private lenders to exercise much more care in underwriting loans. The profit motive should push lenders to lend only to those borrowers most likely to repay the debt. Private lenders also have more expertise in analyzing business plans, industry trends, and financing options than their Federal counterparts. However, having some degree of private financing is not a panacea for eliminating risk—both the AID and the SBA programs mentioned above have default rates of about 15 percent.

#### *Require Borrowers to Pay Fees*

Most current loan guarantee programs require borrowers to pay either an up-front fee (when the loan is made) or an annual fee (collected as the borrower pays off the loan). Up-front fees are more common and typically range from less than 1 percent to more than 5 percent of the loan amount.

If properly designed, up-front fees can reduce the subsidy cost by a corresponding amount. Two caveats apply, however. First, there is a limit to the amount of fees that borrowers would be willing to pay—and that amount is likely to be far smaller than the subsidy cost of this program. Second, unless borrowers are prohibited from capitalizing the fee either directly (by adding it to the loan amount) or indirectly (by having third parties pay the fee, which would in turn be recovered through increased costs for equipment or services), their debt-service costs, and thus the risk of default, will increase. Capitalizing fees can also result in borrowers' having insufficient collateral to support the loans.

Many Federal programs, particularly those involving housing and business loans, impose annual fees. The fees typically range from about 0.5 percent to 0.75 percent of the outstanding balance of a loan. Such fees can significantly reduce subsidy costs for programs that are characterized by a low risk of default and by long maturities (between 15 years and 30 years). However, annual fees cannot be collected if a loan is in default, so they may not significantly reduce subsidy costs for programs in which the expected default rate is high.

#### *Protect the Government's Security in the Event of Default*

H.R. 1554 would make Government liens superior to all other liens on the assets of borrowers, up to the unpaid balance of the guaranteed loan. Such priority ensures that the Government would maximize the amount it could recover in the event of default.

Some parties have suggested that legislation allow the Government's guarantee to be subordinate to private sector financing. But that would reduce the incentive for the lender to assess the riskiness of the loan and increase the likelihood that if a default occurred, the Government's loss would be very significant. For example,

the SBA guarantees financing to businesses in both the Section 504 Certified Development Company and the Section 7(a) General Business Guaranty programs. In the 504 program, the Government's guarantee is subordinate to that of the lender; in the 7(a) program, the Government's guarantee is equal in priority. Recoveries from defaulted loans have been significantly lower in the 504 program, even though it requires collateral in real estate and equipment and the 7(a) program does not.

*Ensure Effective Underwriting Criteria*

H.R. 1554 would direct the Secretary of Agriculture to develop underwriting criteria for the guaranteed loans in consultation with the Office of Management and Budget and an independent accounting firm. Although the CBO expects the resulting standards to be consistent with current Government practice, lawmakers may want to spell out some of the criteria in law. For example, legislation could require that the liquidation value of the collateral be equal to the outstanding principal balance of the loan. Even at that level, however, collateral alone would not eliminate the subsidy cost of a program because of the time and expenses associated with care and preservation, liquidation, and litigation of the collateral.

The criteria for evaluating loans could also be strengthened. H.R. 1554 would allow projections of an applicant's ability to repay a loan to include the value of collateral pledged to protect the Government's interest. Collateral provides a basis for recoveries in the event of defaults; it is not a substitute for cash flow. As a result, it is not a useful basis for determining whether an applicant's project is viable.

**Conclusion**

It is possible to reduce the cost of proposals to guarantee loans for delivering additional television services to rural areas, but it is not possible to eliminate all of the risk or cost of making such guarantees. In theory, the purpose of a Federal loan guarantee is to provide credit for activities that the private marketplace considers too risky to pursue on its own. Such support comes at a cost.

The surest way to reduce the cost of proposals like the one included in H.R. 1554 would be to reduce the size of the Federal loan guarantee. Other modifications, such as charging fees or improving underwriting criteria, are unlikely to reduce the estimated subsidy appreciably because the activities being financed are fundamentally risky. Options designed to reduce the cost to the Government could make the program less attractive to potential borrowers or lenders, which in turn could reduce the demand for the loan guarantees.



CONGRESSIONAL BUDGET OFFICE  
U.S. CONGRESS  
WASHINGTON, DC 20515

Dan L. Crippen  
Director

November 10, 1999

Honorable Bob Goodlatte  
U.S. House of Representatives  
Washington, DC 20515

Dear Congressman:

At your request, CBO has prepared an estimate of a proposed amendment to H.R. 1554, the Satellite Home Viewers Improvements Act. The amendment would establish a loan guarantee program for certain companies to provide local television service to areas of the country that do not receive local television stations from satellite companies. The amendment has been adopted as title II of the conference report on H.R. 1554, which was approved by the House of Representatives on November 9, 1999. The provision would authorize the appropriation of the amounts necessary for the costs of the loan guarantees and for associated administrative expenses. The Secretary of Agriculture's authority to guarantee loans would be contingent upon future appropriation action and would expire on December 31, 2006.

The amendment would authorize federal loan guarantees to qualified borrowers, totaling up to \$1.25 billion. A guarantee could be issued only if the National Telecommunications and Information Administration certifies compliance with various conditions. Under the amendment, all guaranteed loans must be \$100 million or less except that one loan could be as much as \$625 million. All of the loans would have to be payable in full within the lesser of 25 years or the useful life of the assets purchased with the guaranteed loan. Finally, the amendment would provide the Secretary of Agriculture with broad authority to modify the terms and conditions of loans made under this amendment.

Under procedures established by the Federal Credit Reform Act of 1990, the subsidy cost of a loan guarantee is the estimated long-term cost to the government, calculated on a net present value basis (excluding administrative costs). We estimate that the loan guarantees provided under the amendment would cost about 28 percent of the total amount guaranteed—or \$350 million,

Honorable Bob Goodlatte  
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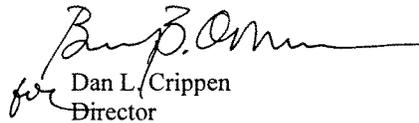
subject to the availability of appropriated funds. The amendment would authorize the Secretary of Agriculture to charge fees, which could offset some of the subsidy or administrative costs, but this estimate assumes no fees would be charged.

To prepare this estimate, we consulted with industry experts and investment analysts, and examined the credit ratings of firms in the satellite television industry. However, we made no assumptions about the participation of specific companies. Assuming appropriation of the necessary amounts, we estimate that implementing this amendment would cost about \$350 million for subsidy costs over the 2001-2002 period. In addition, CBO estimates that administering the program would cost about \$5 million in 2000 and about \$2 million in each subsequent year. The estimated costs are shown in the following table.

|  | By Fiscal Year, in Millions of Dollars |      |      |      |      |
|--|--|------|------|------|------|
|  | 2000                                   | 2001 | 2002 | 2003 | 2004 |
| <b>SPENDING SUBJECT TO APPROPRIATION</b> |  |      |      |      |      |
| Estimated Authorization Level            | 5                                      | 352  | 2    | 2    | 2    |
| Estimated Outlays                        | 5                                      | 230  | 124  | 2    | 2    |

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contacts are Mark Hadley and Kathleen Gramp, who can be reached at 226-2860.

Sincerely,

  
for Dan L. Crippen  
Director

cc: Honorable Tom Bliley  
Chairman  
House Committee on Commerce

Honorable Bob Goodlatte  
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Honorable John D. Dingell  
Ranking Minority Member

Honorable John McCain  
Chairman  
Senate Committee on Commerce, Science,  
and Transportation

Honorable Ernest F. Hollings  
Ranking Democrat

Honorable Henry J. Hyde  
Chairman  
House Committee on the Judiciary

Honorable John Conyers Jr.  
Ranking Democratic Member

Honorable Orrin G. Hatch  
Chairman  
Senate Committee on the Judiciary

Honorable Patrick J. Leahy  
Ranking Minority Member